



University
of Glasgow

<https://theses.gla.ac.uk/>

Theses Digitisation:

<https://www.gla.ac.uk/myglasgow/research/enlighten/theses/digitisation/>

This is a digitised version of the original print thesis.

Copyright and moral rights for this work are retained by the author

A copy can be downloaded for personal non-commercial research or study,
without prior permission or charge

This work cannot be reproduced or quoted extensively from without first
obtaining permission in writing from the author

The content must not be changed in any way or sold commercially in any
format or medium without the formal permission of the author

When referring to this work, full bibliographic details including the author,
title, awarding institution and date of the thesis must be given

Enlighten: Theses

<https://theses.gla.ac.uk/>
research-enlighten@glasgow.ac.uk

THE MAKING OF
ROYAL ARMY ORDNANCE CORPS
MANAGERS

A thesis submitted to the University of Glasgow in fulfillment of
the requirements for the degree of Master of Letters in the Faculty
of Social Sciences.

R E THOMAS
Department of Management Studies
University of Glasgow

June 1989

(C) R E Thomas 1989

ProQuest Number: 10970966

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10970966

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

DECLARATION

No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of the University of Glasgow, or any other university or institute of learning.

ABSTRACT

This study examines the management education and training available to Army officers serving with the Royal Army Ordnance Corps (RAOC). The RAOC is the Army's principal supply corps, with responsibility for receiving, holding and issuing those commodities required to sustain the Army in peace and war. There are many similarities between the RAOC and other large public service and private sector organisations in the material management and distribution industry.

Although RAOC has a long tradition of training and educating its officers in management subjects, the reasons for giving officers this type of training have only been defined in very general terms and no previous research has been undertaken to evaluate the relevance and success of the training. Using a combination of surveys and informal interviews with 90 senior RAOC officers, the need for, and likely content of, management training in the Corps has been established. A survey of approximately 100 officers who have received postgraduate management education was also carried out in order to identify how effective that education has been in meeting both organisational and individual objectives.

The findings of the study indicate that a continuous, progressive and career-long management training programme is required. Rapid, and accelerating, change make the managerial task ever more complex and demanding, and the skills, knowledge and attitudes managers require in order to perform efficiently and effectively need to be developed. Current training only partially meets the needs which have been identified, in so far as training is currently concentrated in an officer's early years and there is inadequate provision for more senior officers. A number of changes to the pattern of training are recommended.

The study also shows that the higher management education courses to which the Corps sends its officers do not meet organisational or individual needs, and in many cases are too narrow or specialised. A more generalist course is required and the typical MBA degree course, consisting of a number of core subjects and subsidiary subjects, would be the most suitable. Ideally this should have a modular format, with opportunities to use in-company training and projects, and it should be spread over a number of years. Closer cooperation between academia and industry is now making this type of course structure feasible.

The current upsurge of interest in management education and training in the wake of the Handy (1) and Constable/McCormick (2) Reports, and the new initiatives which have followed, has provided a wealth of data with which the findings of this study can be compared. The majority of the findings of this study support the conclusions of other researchers.

- (1) C B Handy, "The Making of Managers", NEDO, 1987.
- (2) J Constable and R McCormick, "The Making of British Managers", BIM/CBI, 1987.

ACKNOWLEDGEMENTS

This study could not have been undertaken without the support and assistance of a large number of people. I am indebted to those of my fellow officers who have given freely of their time to complete questionnaires or discuss their views on the future of management education and training in the Corps. I am also grateful to those members of a variety of academic institutions who have been so cooperative in discussing current and future developments in management education. Similarly, fellow members of BIM, AMED and AMBA have been invaluable in providing information and insights into the way in which management development is being carried out by other organisations.

I am particularly indebted to my supervisor, Dr R G L Von Zugbach de Sugg, for his advice and guidance during the preparation of this thesis.

Finally, a special word of thanks to Miss Avril Wilkinson for her skill, and patience, with the wordprocessing of this document.

PREFACE

The author is a serving officer in the Royal Army Ordnance Corps. He currently holds the rank of Lieutenant Colonel.

The research for this study was undertaken whilst he was holding the appointment of Senior Instructor in the Management Wing of the School of Ordnance at Blackdown Barracks, Camberley.

The research was carried out on a part-time basis during the period October 1986 to March 1989. The terms of reference for the study were drafted in consultation with Headquarters, Director General of Ordnance Services, with whom responsibility rests for the implementation of the recommendations arising from the study. The majority of the recommendations have already been accepted and are now being implemented.

CONTENTS

	<u>Page Number</u>
TITLE PAGE	i
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
PREFACE	vi
CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ANNEXES	xii

PART ONE

	<u>PROJECT DEFINITION</u>	1
<u>CHAPTER 1</u>	<u>INTRODUCTION</u>	2
1.1	BACKGROUND	3
1.2	RESEARCH OBJECTIVES	4
1.3	DEFINITIONS	5
1.4	CONCEPT OF MANAGEMENT TRAINING	7
1.5	RESEARCH METHODOLOGY	7
1.6	LAYOUT OF REPORT	9
<u>CHAPTER 2</u>	<u>LITERATURE REVIEW</u>	11
2.1	INTRODUCTION	12
2.2	GROWTH OF MANAGEMENT EDUCATION	12
2.3	PREVIOUS RESEARCH AND RECENT STUDIES	14
2.4	CIVILIAN STUDIES	14
2.5	MILITARY STUDIES	17
2.6	CIVIL SERVICE STUDIES	18
2.7	EVALUATION OF HIGHER MANAGEMENT EDUCATION	19

2.8	CRITICISM OF MBA DEGREES	20
2.9	NEW INITIATIVES	21
<u>CHAPTER 3</u>	<u>THE NEED FOR MANAGEMENT EDUCATION AND TRAINING</u>	27
3.1	INTRODUCTION	28
3.2	REASONS FOR MANAGEMENT TRAINING	29
3.3	DIAGNOSING MANAGEMENT TRAINING NEEDS	31
3.4	MANAGEMENT DEVELOPMENT METHODS	37
3.5	WHY MANAGEMENT EDUCATION?	41
	<u>PART TWO</u>	
	<u>THE RESEARCH</u>	46
<u>CHAPTER 4</u>	<u>CURRENT TRAINING</u>	47
4.1	INTRODUCTION	48
4.2	MANAGEMENT TRAINING POLICY	48
4.3	PATTERN OF MANAGEMENT TRAINING	50
4.4	SCHOOL OF ORDNANCE	53
4.5	EXTERNAL MANAGEMENT TRAINING	57
<u>CHAPTER 5</u>	<u>TRAINING NEEDS</u>	63
5.1	INTRODUCTION	64
5.2	MANAGEMENT TRAINING SURVEY	64
5.3	MEASURES OF PERFORMANCE	79
5.4	MBA COURSE SUBJECTS	85
5.5	ANALYSIS OF RAOC OFFICER POSTS	89
<u>CHAPTER 6</u>	<u>SURVEY OF POSTGRADUATE STUDENTS</u>	96
6.1	INTRODUCTION	97
6.2	EVALUATION OF CURRENT COURSES	97
6.3	SURVEY FINDINGS	99
6.4	COMMENTS OF RESPONDENTS	120
6.5	CONCLUSIONS	129

<u>CHAPTER 7</u>	<u>THE PROVISION OF MANAGEMENT EDUCATION</u>	132
7.1	INTRODUCTION	133
7.2	TYPES OF MBA DEGREE	134
7.3	INSTITUTIONS OFFERING MBA DEGREES	137
7.4	CRITERIA FOR SELECTION OF INSTITUTION	141
7.5	OPTIONS FOR RAOC	144
7.6	EVALUATION OF FULL-TIME COURSES	145
7.7	EVALUATION OF PART-TIME COURSES	149
	<u>PART THREE</u>	
	<u>CONCLUSIONS AND RECOMMENDATIONS</u>	156
<u>CHAPTER 8</u>	<u>THE WAY FORWARD</u>	157
8.1	INTRODUCTION	158
8.2	SUMMARY OF MAIN FINDINGS	159
8.3	FUTURE POLICY	164
8.4	FUTURE TECHNICAL MANAGEMENT TRAINING	165
8.5	FUTURE GENERAL MANAGEMENT TRAINING	167
8.6	FUTURE MANAGEMENT EDUCATION	173
8.7	A UNIFIED STRUCTURE	179
<u>CHAPTER 9</u>	<u>RECOMMENDATIONS</u>	185
9.1	CONCLUSIONS	186
9.2	RECOMMENDATIONS	187
9.3	FURTHER STUDY	189
<u>ANNEXES</u>		191
<u>ABBREVIATIONS</u>		230
<u>BIBLIOGRAPHY</u>		232

LIST OF TABLES

4.1	RAOC OFFICER QUALIFICATIONS	54
5.1	TRAINING NEEDS - JUNIOR OFFICERS	67
5.3	TRAINING NEEDS - SENIOR OFFICERS	69
5.4	MOST PROMINENT FEATURES OF CURRENT APPOINTMENT	71
5.5	TRAINING NEEDS IN CURRENT APPOINTMENT	71
5.6	MANAGEMENT DEVELOPMENT METHODS	73
5.7	AMA CLUSTERS OF MANAGEMENT COMPETENCIES	81
5.8	CLASSIFICATION OF THE COMPETENCIES OF SUPERVISORS AND MANAGERS	82
5.9	MANAGEMENT COMPETENCIES	83
5.10	CORE SUBJECTS	86
5.11	ELECTIVE SUBJECTS	88
5.12	CORE AND SUBSIDIARY SUBJECTS - MAJORS	91
5.13	CORE AND SUBSIDIARY SUBJECTS - LIEUTENANT COLONELS	94
6.1	EDUCATIONAL QUALIFICATIONS	99
6.2	MILITARY QUALIFICATIONS	100
6.3	MAIN SUBJECTS STUDIED	102
6.4	SUBSIDIARY SUBJECTS STUDIED	102
6.5	RELEVANCE OF SUBJECTS STUDIED	104
6.6	BENEFITS OF MANAGEMENT EDUCATION	106
6.7	PERSONAL EXPERIENCE OF COURSE	108
6.8	SUITABLE APPOINTMENTS FOR MANAGEMENT TRAINED OFFICERS	109
6.9	MEMBERSHIP OF PROFESSIONAL INSTITUTES	110
6.10	APPOINTMENTS HELD (BY TYPE)	111
6.12	MANAGEMENT CONTENT - BY TYPE OF APPOINTMENT	114
6.13	TRAINING NEEDS	115
6.14	CONTRIBUTION TO THE DEVELOPMENT OF GOOD MANAGERS	116
6.15	PERCEIVED PERFORMANCE OF MANAGEMENT TRAINING/EDUCATION	119

7.1	SUMMARY OF UK FULL-TIME MBA COURSES	138
7.2	SUMMARY OF UK PART-TIME MBA COURSE	140
7.3	PEER GROUP REVIEW OF TEACHING AND RESEARCH 1984	142
7.4	COMPARATIVE ANALYSIS OF INSTITUTIONS	150

LIST OF FIGURES

3.1	CHANGING PATTERN OF SKILLS	33
3.2	EVOLVING NEEDS FOR SKILLS	34
3.3	MODEL OF GENERAL MANAGERIAL COMPETENCY	35
4.1	RAOC OFFICERS' MANAGEMENT TRAINING PATTERN	51
5.1	TRAINING NEEDS PROFILE	68
5.2	BIM DIPLOMA - COMPETENCIES	84

LIST OF ANNEXES

A	QUESTIONNAIRE 1 - MANAGEMENT DEVELOPMENT AUDIT	191
B	QUESTIONNAIRE 2 - SENIOR OFFICER SELF-ASSESSMENT CHECK LIST	195
C	QUESTIONNAIRE 3 - MANAGEMENT DEVELOPMENT METHODS SURVEY	197
D	SENIOR OFFICER SELF-ASSESSED TRAINING NEEDS	204
E	CLASSIFICATION OF THE COMPETENCIES OF SUPERVISORS AND MANAGERS	206
F	SURVEY OF RAOC OFFICERS WHO HAVE RECEIVED POSTGRADUATE MANAGEMENT TRAINING	209
G	RESEARCH TOPICS	225

PART ONE

PROJECT DEFINITION

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The last decade has seen an enormous and rapidly accelerating number of social, political, technological and economic changes which have impacted on all levels of society and have made the management task more complex and demanding. The 'microchip revolution' and the expansion of information technology have been particularly significant in this context. Changes in society in general have been reflected in the military environment and have led to a number of modifications to the way in which the Services operate. Increased financial constraints and greater accountability are but two of the measures which have been introduced as a result of recent Government initiatives.

These changes have been a major factor in creating an upsurge of interest in both higher education, in general, and management education, training and development, in particular. Change, and the transition to new practices and new technology, can only be achieved through the acquisition of new knowledge, skills and attitudes, and in most cases this requires an element of training. This heightened awareness of the importance of training, including management training, has been reflected in some of the extensive studies which have been undertaken recently, and the measures which have been taken to implement the recommendations of these studies.

Recent studies have included those by Professors Constable (1), Handy (2) and Mumford (3) and these have led to the formation of the Council for Management Education and Development (CMED) and the launch, in November 1987, of the Management Charter Initiative. CMED is a tripartite body with membership drawn equally from business, the relevant academic bodies and the Government. The Management Charter Initiative aims "to develop the professionalism and business proficiency of managers at all levels" and this includes the creation of a formal, professional qualification - Chartered Manager. Within the Army we have seen the publications of the Beach (4), ROTE (5) and ROCS (6) reports, each of which had major implications for officer education and training.

The recent Government White Paper and subsequent Bill to reform education, including tertiary education, is also likely to be an important catalyst in the efforts to achieve a convergence of the interests of industry and academia, and this is certain to be particularly relevant in the field of management education. An enhanced awareness of the education and training needs of managers has already begun to give rise to new courses, modifications to syllabuses and to methods of delivery. The importance of

transferable qualifications has been recognised and the Council for National Academic Awards (CNAA) and the National Council for Vocational Qualifications (NCVQ) are seeking ways to improve the current situation. Within the Army, the Royal Military College of Science (RMCS) has carried out a pilot study to examine ways in which military qualifications might be fitted into this national framework (7).

1.2 RESEARCH OBJECTIVES

The Royal Army Ordnance Corps (RAOC) is the Army's principal logistic Corps with responsibility for receiving, holding and issuing those commodities required to sustain the Army in both peace and war. Materiel supplied by RAOC includes combat supplies (ammunition, rations and petroleum), ordnance stores (such as weapons, radios, tentage, clothing and spares) and vehicles (armoured and soft-skinned vehicles of all types). The total value of the inventory is some £3000 million. RAOC employs approximately 8000 military personnel (of whom 1100 are officers) and 14000 civilians worldwide. The majority of these work in a number of large central depots in UK and BAOR.

Management practices in the Services, and particularly in RAOC, are very similar to those which are to be found in civilian organisations. Indeed, in recent years, manpower reductions and financial constraints have led to the adoption of many of the budgetary and other control measures which are used so effectively by the more successful civilian companies. The management style throughout the Services is changing from one of being reactive to proactive; anticipation and planning are the order of the day, rather than observation and reaction. This cannot, of course, happen overnight. New skills and attitudes must be acquired and in many cases this can only be achieved by training.

Throughout its distinguished history the RAOC has sought to provide its officers with the professional training which they require in order to carry out their many and varied tasks. This is especially true in the case of management training and, in some respects, the Corps can claim to have been a pioneer in what is now a rapidly expanding discipline. Selected officers have attended courses at the University of Manchester Institute of Science and Technology (UMIST) for almost 40 years. Since 1949 a total of 421 RAOC officers have received postgraduate management education at UMIST and many have gone on to achieve high rank within the Corps. A more comprehensive description of the historical links with UMIST and details of the way in which the course has developed are to be

found in an article written by Davies (8) in the Director General of Ordnance Services (DGOS) Information Bulletin. In recent years a small number of officers have also been selected to study at Cranfield Institute of Technology (CIT) and two officers have been awarded Master of Defence Administration (MDA) degrees as a result of attending a new postgraduate course at RMCS. However, in spite of the long association with UMIST, the objectives of sending officers on postgraduate management courses have only been defined in very general terms and no efforts have been made to ascertain whether the education they receive meets the requirements of the Corps or the individuals concerned. The changes to the way in which the Army conducts its business demanded a reappraisal of current policy in respect of management training and education for RAOC officers. Thus the main objectives of this study were:

- a. To evaluate current higher management training for RAOC officers to determine the extent to which individual and organisational objectives are being satisfied.
- b. To propose any modifications to current training which might be necessary to achieve these objectives.

1.3 DEFINITIONS

Management. This has always been very difficult to define and there is no clear consensus about the nature of 'management'. As Peel (9) points out, "Unless the nature of an activity, its function and purpose, is understood, it is difficult to train for it". The lack of consensus is reflected in the literature, which is full of debate about whether management is an art or a science, or both; whether managers are born, can be made, or only slightly improved. In military circles discussion continues about the relationship of leadership and management. Conventionally the title of manager has been given to people who are one or more levels above the supervision of operatives in the organisational hierarchy. This is particularly applicable in a traditional manufacturing organisation. The decline of the manufacturing sector, the growth of less hierarchical organisational structures and the increased importance of specialists within organisations makes this way of defining a manager less appropriate, even within a Service environment. An alternative approach is to consider the activity of 'managing'. Those people who have studied the activity of managing fall into a number of groups, or schools, of management theory. These include the Classical, or Process, school, the Behavioural school, the Decision Theory school (of which the Scientific school may be part), the Work Activity school and so on.

The work of Kotter (10), Mintzberg (11) and, in the UK, Stewart (12,13) is particularly relevant in this context. Although each of these approaches has led to fresh insights, none has produced a definitive theory and the debate continues. Nevertheless a distinction can be drawn between general management and technical, or specialist, management:

- a. General Management. This is normally concerned with our most vital resource - manpower - and deals with decision-making, motivation, communication, leadership, the effective use of time, employee legislation and the like.
- b. Technical or Specialist Management. This is concerned with the other resources of materiel, machinery and money. In an RAOC context we are talking about inventory control, provisioning, warehousing and the like and, increasingly, with financial and budgetary considerations.

Education, Training and Development. The lack of consensus about what constitutes managerial activity inevitably spills over into any discussion about how best to help managers carry out their task. Managerial learning takes many forms and Easterby-Smith (14) divides these processes into three broad categories:

- a. Education. 'Management education' is generally applied to both longer-lasting and longer-term activities than 'management training'. Most management education is conducted in institutions such as universities and colleges and normally involves the award of academic qualifications. The one year MSc course at UMIST falls into this category.
- b. Training. Whilst this usually includes attending a course, it may also take place on-the-job. Such procedures as coaching by a superior, study assignments and some of the activities involved within 'action learning' might be included in this definition of training. A two day course in time management would certainly be regarded as training.
- c. Development. In some definitions both training and education are seen as sub-systems of 'management development', which is now generally used to describe the use of any technique or techniques to develop managers. It thus includes activities such as appraisals, job rotation, on-the-job experience and self-development by reading and study, as well as attending education and training courses.

1.4 CONCEPT OF MANAGEMENT TRAINING

Changes to the way in which managers are educated and trained are leading to a blurring of the distinctions between these categories and the terms are sometimes used synonymously. Although this study is concerned primarily with management education and, in particular, with postgraduate management education, this must be examined in relationship to the other training and education which an officer is likely to receive during his career. Much of this will be of a formal, course-based nature. However, formal training will not of itself achieve the objectives of either the organisation or the individual. Many of the management theorists referred to earlier (irrespective of their particular 'school'), have had much to say on this topic. McGregor (15) for example, whilst acknowledging the part which training courses have to play, insists that managerial capacity and potential must also "..... be developed by a wide variety of experiences through which they could acquire greater understanding, awareness, sensitivity, self-confidence and those other aspects of effectiveness that were regarded as most important but which could not be inculcated".

One particularly important result of this approach is that management training must be seen as a continuous process. As Handy (16) says, individuals change over time. They acquire new knowledge or technical skills and find new capacities within themselves or from interaction with others in order to become more productive or effective. One of the functions of management training within the organisation must be to hasten and channel this process of learning and discovery.

That management training must be continuous and progressive and that it involves much more than attending a course are regarded as being fundamental concepts. The principles of officer training laid down by ROTE are also relevant: "Management training must be, professionally relevant, appropriate to that stage of an officer's career and to his potential, and should be no longer and no more than is necessary to prepare him for his role. Training should be carried out as economically and efficiently as possible, and confirmed where necessary" (5).

1.5 RESEARCH METHODOLOGY

The scope of the study was such that information had to be gathered from a variety of sources and wide consultation has been needed. Some of the activities which have been undertaken include the following:

- a. Consideration of Previous Studies. An extensive literature search of both military and civilian publications was carried out. Reference will be made to these documents at appropriate points in this report and the findings and recommendations of the more important studies are outlined in the next chapter. The Civil Service has also been studying the need for and the provision of higher management training and willingly made their study reports available.
- b. Interviews and Discussions. Throughout the study many informal discussions took place with a variety of both military and civilian experts in this field. There is enormous interest in likely future developments in management education and in consequence no shortage of advice and opinion. Some of the informal discussions with distinguished academics were particularly useful and many offered access to private documents and unpublished papers.
- c. Visits. A number of visits were made to academic institutions during the study and several useful and relevant conferences were attended. Conferences organised by the British Institute of Management (BIM), the Association for Management Education and Development (AMED) and the Association of Masters of Business Administration (AMBA) were particularly useful as they provided a forum for the discussion of current and future developments in management education and training by academics, practitioners and user organisations.
- d. Training Need Analysis. In order to identify management training needs, a survey of all senior officers in the Corps (ie. Lieutenant Colonel and above) was carried out. This was reinforced by an analysis of the job specifications of 75 Lieutenant Colonel and 212 Major appointments. This served to highlight the management subjects which are most relevant to the majority of Corps officers and, in turn, allowed a comparison to be made with the syllabuses of the various university business schools or management faculties.
- e. Survey of RAOC Students. A comprehensive survey of all those RAOC officers who have attended UMIST or CIT since 1974/75 was carried out in order to obtain feedback on the relevance and value of the courses which they studied and also to obtain their views on the future form and content of management education for Corps officers.

f. Evaluation of Available Courses. Finally, in order to match the needs of RAOC officers to the various types of courses now available, an evaluation of these courses was undertaken, prior to formulating recommendations for future training.

More detailed descriptions of the methodology used preface each of the chapters which describe the research findings.

1.6 LAYOUT OF REPORT

The report is divided into three main parts, each of which is further divided into a number of chapters. The first part includes the literature review and an examination of some of the more important theories and concepts which underlie the provision of management education and training. Part Two contains the results of the primary research which was undertaken. It includes the findings of the surveys which were carried out to establish training needs and to determine the extent to which current training is meeting these needs. An evaluation of the type of courses which are available to meet current and future needs completes this section of the report. The third part of the report draws together the main conclusions of the study and makes recommendations for future training.

REFERENCES

- (1) J Constable and R McCormick, "The Making of British Managers", BIM/CBI, 1987
- (2) C B Handy, "The Making of Managers", NEDO, 1987
- (3) A Mumford, "Developing Directors", MSC, 1987
- (4) A Study of Education in the Army (Beach), Final Report, Dec 1984
- (5) Review of Officer Training and Education (ROTE), Final Report, Dec 1985
- (6) Review of the Officer Career Structure (ROCS), Final Report, Oct 1986
- (7) The Final Report for the Study into the Recognition of Service Courses (D/DAT/1/38/4/1 ATlb dated 21 Jul 88)
- (8) Maj D L Davies, "Higher Management Training", DGOS Information Bulletin, Aug 1980
- (9) M Peel, "Management Development and Training", BIM, 1984
- (10) J P Kotter, "The General Manager", Free Press, 1982
- (11) H Mintzberg, "The Nature of Managerial Work", Prentice-Hall, 1980
- (12) R Stewart, "Managers and their Jobs", Macmillan, 1967
- (13) R Stewart, "Contrasts in Management", McGraw-Hill, 1976

- (14) M Easterby-Smith, "Evaluation of Management Education, Training and Development", Gower, 1986
- (15) D McGregor, "The Human Side of Enterprise", McGraw-Hill, 1960
- (16) C B Handy, "Understanding Organisations", Penguin, 1981

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The formal study of management is a comparatively recent phenomenon. The Harvard Graduate School of Business Administration was the first institution of its kind and this was not founded until 1908. The lead given by the USA in this area is still significant. In the UK, early management education was largely at undergraduate level with a few universities teaching subjects such as 'commerce' and 'social administration'. In both countries the Second World War highlighted the need for, and the importance of, management training and a number of initiatives were taken to establish management training institutions. The RAOC was at the forefront of this trend and helped to establish a course at Nottingham University in 1948 (allegedly as a recruiting gimmick), before switching to UMIST in the following year. It was not, however, until the 1960s that management or business education became a widely accepted university discipline in the UK, with courses at both undergraduate and postgraduate levels. In recent years the volume and content of these courses have undergone considerable change and there has been extensive debate about the direction in which management education should develop in the future.

Some understanding of the many issues involved is necessary before firm plans can be made for the future of higher management education for RAOC officers. This chapter will examine briefly some of the most significant stages in the development of management education before going on to look at some of the recent studies which are likely to shape events in the future.

2.2 GROWTH OF MANAGEMENT EDUCATION

Although writers such as Life (1) have attempted to demonstrate that management education and training dates back to the industrial revolution, it was the pressures of war, and its immediate aftermath, which stimulated developments in both the UK and the USA in the period from 1945 onwards. The Armed Forces can take much of the credit for both the format and content of some of the early training. As Peel (2) states "The belief that management could and should be a profession in its own right received a great boost from the war itself. The clear nature of command within the Armed Forces, and the machinery for selecting and training officers, produced the feeling that perhaps things should be the same in 'civvy' street". The creation of the Administrative Staff College at Henley in 1948 owed much to the Army Staff College model. However, progress was slow and post-experience, non-qualification courses offered at institutions such as Henley and Ashridge

Management College were few in number and relatively unfocused in direction. The formation of the British Institute of Management (BIM) in 1947 provided an important stimulus and the introduction of diploma courses at technical colleges widened the availability of postgraduate management training. These courses were mainly part-time and by the 1960s led to the award of the Diploma in Management Studies (DMS). Output from the DMS has remained fairly static in recent years, at approximately 1800 per annum, and it has never been a popular or widely accepted qualification in military circles.

Developments in the 1950s included the formation of the Foundation for Management Education. This was essentially a pressure group made up of a small number of leading industrialists and politicians. Its main purpose was to promote management education and it sought to raise funds from industry to assist this objective. The National Economic Development Council was established in 1963 and this too saw a need for more management education in Britain, to match the standard set by Harvard and the Massachusetts Institute of Technology in the USA. These organisations undoubtedly influenced the 1963 Robbins Report (3) on higher education which recommended that two postgraduate management schools should be built in addition to an expansion of other universities. This recommendation was explored in more detail in the Franks Report, which was also published in 1963 (4). Lord Franks took the view that two postgraduate management schools should be set up in London and Manchester. Urban locations were deliberately chosen to facilitate a close relationship between industry and academia because Franks foresaw that each might have conflicting objectives and close co-operation was essential. For similar reasons he recommended that the new business schools should have a high level of independence within the parent university. He also advised against the slavish adoption of the American business school model and recommended a one-year postgraduate course with each business school achieving an annual output of 200 students.

Following the Franks Report, £5 m was raised from industry and commerce, together with matching sums from government, to establish the London and Manchester Business Schools in 1965. Funds were also used to support management education in other universities and to train university teachers in the USA. During the late 1960s and into the 1970s growth of undergraduate and postgraduate programmes continued. Much of this growth took place in the newer universities and the polytechnic sector, as there was considerable unease in some of the more traditional universities about the academic value of business or management studies. In recent years many of the doubts have been overcome and there has been a rapid expansion in the provision of

management education. 23 universities currently provide undergraduate degrees and 30 provide postgraduate degrees. 41 polytechnics and colleges provide courses, including the DMS (5). At postgraduate level the most common qualification is the Master of Business Administration (MBA) degree, although one or two universities (including UMIST) award an MSc for what is often a very similar course. In 1985 the total output of postgraduates with qualifications in business or management subjects was approximately 3,100. In addition, about 300 people obtained research-based degrees in these subjects. It should be noted, however, that over one-third of these postgraduates were overseas students (5).

2.3 PREVIOUS RESEARCH AND RECENT STUDIES

Previous studies have adopted a variety of both quantitative and qualitative approaches to the subject of management education. Some studies have been descriptive in nature with only minor proposals for change. Others have been very critical of current provision and have made more radical recommendations for new methods and content. Many of the studies have highlighted the difficulty of collecting reliable data. Above all it is apparent that there has been comparatively little evaluation of what is available, beyond the expression of subjective opinion.

2.4 CIVILIAN STUDIES

Management training has come under scrutiny in several recent studies, including the Coopers and Lybrand report "A Challenge to Complacency" (6) and Professor Mangham's survey titled "Management Training; Context and Practice" (7) Both of these reports highlighted how little provision industry was making for management training, with over half of all companies providing none at all.

The two most important and influential pieces of research carried out in recent years were the Handy (8) and Constable/McCormick (5) studies. The former, titled "The Making of Managers" was a comparative study of management education, training and development in the USA, West Germany, France, Japan and the UK. It demonstrated all too clearly how little preparation British managers receive in comparison with their overseas counterparts. The latter, titled "The Making of British Managers" looked in great detail at management education and training in the UK. Four working parties were established to look at specific facets of the subject and four reports were produced, with an overview being provided in the main report. The working parties were established to consider respectively:

- a. Employers views of the demand for management education and training.
- b. Individuals' views of the demand for management education and training.
- c. The provision of non-qualification programmes by private colleges and organisations, management consultants, professional institutes and universities, polytechnics and colleges.
- d. The provision of in-company management training.

The two reports came to very similar conclusions and made broadly similar recommendations. Both challenged what Hussey (9) has called 'the cult of the amateur', which is prevalent in much of British management, and stressed the need for every manager to have a basic qualification in management before undertaking his first management job. Both reports envisaged an enormous increase in the demand for management education in the future and emphasised the need for closer co-operation between training establishments and industry if this demand is to be met. This may lead to more flexible systems with the ability to provide transportable qualifications through a credit system. There may need to be a greater emphasis on skills and competencies, rather than just the acquisition of knowledge, in the future. The reports called for further postgraduate MBA programmes in order to provide a two-part qualification for all managers. The Constable/McCormick report recommended that the output of MBAs should be increased to 10,000 per annum. Both reports also stressed the importance of managers taking more responsibility for their own development and saw this as a continuous, progressive process. The two reports form the basis of a subsequent book by Handy et al (10) which explores the requirement of an increase in the provision of management education and training in more detail, and also documents some of the measures which have already been introduced.

These reports, which have attracted considerable interest and support from government, could have important implications for the Armed Forces. There may be a need to conform to civilian practice in respect of training and qualifications and there will undoubtedly be increased competition for scarce, but better qualified, manpower resources.

A number of further studies are worthy of mention. The first of these is Professor Mumford's study, undertaken on behalf of the Manpower Services Commission and titled "Developing Directors" (11).

This, as the title implies, looked at senior management appointments and found significant shortcomings in current practice. The emphasis in this study was on 'development', which can be formal or informal, and it identified three types of development processes: accidental, opportunistic and planned. Mumford considered that greater use could be made of current managerial activities for developmental purposes on an opportunistic basis. The Wills Report 1988 (12), titled "Creating Wealth Through Management Development", described the management development activities of the International Management Centre from Buckingham (the programme includes an MBA degree) and strongly supported the action-learning approach. The importance of the developmental approach for senior personnel was also recommended in Cunningham's research (13).

A more recent study undertaken by Ashridge, in conjunction with the Foundation for Management Education (14), makes a number of observations on the likely future of management education. The study, which has an international perspective, identifies three stages of development for management education and training. Many companies provide fragmented training unrelated to organizational strategy or goals. Some have a more systematic approach which links training to appraisal and career development. In the future it will be necessary for companies to use training as a competitive weapon, linking learning to both organizational strategy and to individual goals. Continuous learning will be vital for survival in a rapidly changing business environment. The report describes this as "the learning organisation", which coincidentally is the title of a recent book by Garratt (15). This important and influential book has much to say about the key skills of learning continuously and giving 'direction' or leadership. The study also concludes that new forms of training, including open and distance learning, will be utilised and project-based learning will help to promote a much closer relationship between industry and the business schools or management colleges.

The growing interest in management education has, inevitably, been reflected in the media. The quality press, in particular, has published a number of major supplements and leading articles. These include recent issues of the Financial Times (16) and the Times Higher Education Supplement (17). These articles serve an important role in educating the layman and encouraging informed debate of the issues. Articles in journals such as 'Business Education', 'The Journal of Management Development', 'The Journal of General Management' and 'Management Education and Development', the journal of the Association for Management Education and Development (AMED), serve a similar purpose but reach a somewhat different audience.

Many of the proposals for the future of management education have not received universal support. Much of the criticism has centred on the role (18) and format (19) of the MBA. Is it to be a two-stage qualification? What syllabus should be followed and how should it be funded? It is interesting to note that the Council of University Management Schools (CUMS), which broadly welcomes the recommendations of both the Handy Report and the Constable/McCormick Report, has a number of reservations. Many of these focus on the proposals for a Diploma in Business Administration (DBA) and its relationship to both undergraduate and MBA programmes and the existing DMS. The CUMS comments on the reports are summarized in the new edition of 'Guide to Business Schools' (20).

2.5 MILITARY STUDIES

There have been several important military studies in the last few years which have had an influence on military education, including management education. The first of these was the Beach Report (21), a wide-ranging study of education in the Army. The study recommended that education in the Army should be: professionally relevant; progressive and structured; for capability; relevant to civilian life. It had much to say about management education and training, for both officers and soldiers, and came out strongly in support of postgraduate courses such as that used by RAOC officers at UMIST. The growing necessity for and importance of higher education for Service officers was stressed in the Beach Report and in a subsequent article in the British Army Review (22) by the Commandant, Royal Military College of Science.

The Review of Officer Training and Education (ROTE) study (24) reported in Dec 1985. The aim of the study was "to define the essential common training, including education, required by regular officers during their careers and to recommend a programme for that training which is balanced, progressive and cost effective". In the new climate of increased financial accountability, the ROTE report gave its unqualified support to the need for management training: "....for potential senior logistic managers in the UK. This need encompasses training both in the area of financial management and also in the area of modern management techniques to improve cost effectiveness. The sums of money involved in the logistic support function are such that small improvements in managerial efficiency can lead to substantial savings" (23). The report highlighted shortcomings in the current provision of training for financial and logistic management, some of which are now being addressed.

The Review of the Officer Career Structure (ROCS) study (24) was carried out immediately after the ROTE study and reported in Oct 1986. Due note was taken of the recommendations of ROTE and the opportunity was taken to reinforce some of the comments on education, including tertiary education, as it impacts on the recruitment of officers and their subsequent retention in the Army. Both ROTE and ROCS acknowledged the need for more education and more specialisation. Some of their recommendations, for example, longer tours and more stability, were intended to facilitate these changes.

The ROTE and ROCS reports recommended that Army training courses should be recognised by academic institutions and should count toward degrees or other civilian qualifications. The mechanics for achieving this were not specified but in 1987 RMCS was tasked with carrying out a feasibility study into accreditation of Service courses. An interim report concluded that this may be possible either under the auspices of the Council for National Academic Awards (CNAA) or a university senate (and Cranfield Institute of Technology is a possible contender). This is likely to be a very slow process and may not come to fruition for many years.

Within RAOC there have been very few studies of the need for, or the format of, management education and training in recent years. This study is the only substantial review to have been carried out since 1969.

2.6 CIVIL SERVICE STUDIES

There have been two major studies of the way in which the Civil Service trains and educates its senior personnel which are relevant to this study. The first of these was titled "The Training for Senior Management Study" and is widely referred to as the Coster Report (25). Based on thorough research into the broad areas of knowledge and skill required by senior civil servants, a comprehensive training and development programme, known as the Senior Management Development Programme (SMDP), has been established. The programme is aimed at senior staff between the grade of Principal and Assistant Secretary and covers all occupations. It is essentially an in-house programme and is designed to provide structured on-the-job experience as well as specific training to fill gaps in experience. It is a logical preparation for those destined for the highest Civil Service appointments (Under Secretary and above) who will go on to the Top Management Programme (TMP). The study, which was summarised in a recent special edition of Management Education

and Development (26), is particularly useful in so far as it identified the managerial competencies required by senior managers in the Civil Service.

The second study, titled "The Making of Defence Managers" (27), looked at the requirement for senior civil servants in the Ministry of Defence to attend MBA degree courses. The study was placed in the context of the drive for greater professionalism in the Ministry of Defence, the career development and training of future senior managers and current thinking on the making of managers - with reference to the Handy Report and the Constable/McCormick Report. The study considered the MBA degree as but one element of a wider portfolio catering for a range of abilities, grades and responsibilities. The report compared the types of MBA course currently available and evaluated their relevance to the needs of Ministry of Defence personnel. The study concluded with an action plan which detailed the further research considered necessary.

2.7 EVALUATION OF HIGHER MANAGEMENT EDUCATION

One of the most neglected issues in management education is that of evaluation. There is comparatively little published on the subject and many institutions appear to adopt the attitude that because courses are over-subscribed they must be providing what the customer wants and needs. Within a broad, general framework syllabuses are often a factor of staff interest, expertise or current research topics. Much of the literature mentioning evaluation is descriptive or prescriptive i.e. of the cook-book variety. Nevertheless, some of these publications are helpful in so far as they address some of the concepts involved and are useful as text books. The 'Handbook of Management Development' (28) and the 'Management Development and Training Handbook' (29) fall into this category, although much of their content relates to training rather than education. Publications by Beck and Cox (30) and Cooper (31) fall into a similar category but both have largely been overtaken by events in the last few years.

Perhaps the most relevant text book is that by Easterby-Smith (32), in which he suggests a framework for evaluation and also describes many of the data collection media and methods which may assist in the evaluation process. He acknowledges the difficulties inherent in trying to evaluate an imprecise area of study which is laden with values and attitudes and can, therefore, be very subjective. His book is, nevertheless, a worthy successor to an earlier work by Hamblin (33).

There have been a number of studies which have looked at the MBA degree in general or at a single course run by a specific institution. These include Leggatt (34), Whitley et al (35), Hogarth (36), Forrester (37, 38), Peel (2) and Ascher (39). To these must, of course, be added the Handy and Constable/McCormick Reports. The empirical study by Hogarth looked in great depth and detail at the programme conducted at CEDEP, Foutainbleau, France. The Forrester studies, and that by Ascher of the Harbridge House Consulting Group were more descriptive in nature and provided details about the then available courses. They also sought to survey the principal stakeholders in management education - the students, the employers and the academic institutions - to establish the extent to which expectations were being met, as well as factual details about numbers of students, salaries earned by graduates and the like. There was little data about the content of the courses or their relevance to individuals or organisations, and there continues to be a dearth of published information on this subject, which may be a contributing factor to some of the criticism which has been levelled at business schools in the past.

2.8 CRITICISM OF MBA DEGREES

As early as 1969, just two years after the first students graduated from London and Manchester Business Schools, Mant (40), in a report for BIM, found that the courses were unsatisfactory and many senior executives were sceptical of their value. He went on to say that "Most management education programmes for experienced managers were traditional in form and content, little attention was paid to the problem of transmitting classroom learning to the workplace, and there was an absence of any coherent theory of experienced manager action or learning". The criticisms have continued over the years and have taken many forms. Course content continues to stimulate debate and there have been a variety of views expressed on how best to fund higher management education.

As recently as 1984 Peel (2) was able to state, "The MBA, whether from British or USA business schools, but especially the former, has not to this day gained wide acceptance in British industry. MBAs are seen as too theoretical, too mobile, far too highly priced and too disruptive to other managers". Ascher (39) also found that "..... recent evidence indicates that acceptance of the MBA degree in Britain has not been as whole-hearted as in other countries". Forrester's survey for BIM (37) indicated that managers had found much of their course of "no value" or of "peripheral value". Critics of the business schools point out their failure to fulfil the expectations of the Franks Report. Griffiths and Murray (41)

highlight a number of ways in which the implementation of the Franks Report differs from the original proposals. Control is very much in the hands of academic staff and the industry/academia partnership has not materialised. Staff have been recruited mainly from other academic backgrounds and this is reflected in course content and direction. The market need for a vocational orientation has not been met. The slavish adoption of the American business school model may also have been a mistake, as cultural and economic differences have not always been taken into account. Griffiths and Murray argue strongly for the privatisation of business schools and, if necessary, their separation from their parent universities, in order to make them more flexible and more willing to meet the needs of their customers.

There is evidence that the perceptions of potential students and their employers are already changing. Demand for MBA courses is rising and this will be further stimulated by the Handy and Constable/McCormick Reports. There is also evidence that business schools have recognised the need to co-operate with industry and there are a number of examples of institutions tailoring courses to suit the needs of individual companies or small groups of companies (42). As Manasian (43) warns, in an article titled "Degrees of Confusion", the problem in the future may be one of distinguishing between the various products on offer and their relevant prestige or value.

Some of these developments could have major implications for the Corps. Selection of the most suitable courses is critical and there may be some scope for tailoring a course, or courses, to suit the specialist needs of RAOC officers. Changes to the way in which business schools are funded could also affect the cost to the Corps, or the Army, of educating its officers.

2.9 NEW INITIATIVES

The Government continues to be a major player in higher education. The White Paper "Higher Education: Meeting the Challenge" (44) made far reaching proposals for modifying funding and other arrangements for universities, polytechnics and colleges. These proposals have been incorporated into the subsequent legislation which has now passed through Parliament. The intention of the legislation was "... that higher education should serve the economy more effectively; pursue basic scientific research and scholarship in the arts and humanities; and have closer links with industry and commerce. In order to improve the effectiveness of the system the Government proposes to widen access to higher education, remove polytechnics and other higher education colleges from local

authority control, reform the University Grants Committee which allocates funds to the universities, and place new emphasis on the need for quality and efficiency". The Polytechnic and College Funding Council (PCFC) and the University Funding Council (UFC) have been set up to control funding. The Government clearly intends to encourage institutions to attract contracts from other sources, particularly the private sector, and lessen their dependence on public funding. This quest for a closer partnership between higher education, government and industry may not be universally popular but it should have an effect on the nature and quality of the end product. Management education is an obvious area which could benefit from this improved relationship. Other Government initiatives could have a knock-on effect. A recent White Paper entitled "Employment for the 1990s" proposes the establishment of a network of employer-led Training and Employment Councils (TECs) and these could help to increase the provision of management education and training. Government's role in the future has been summarised by Beck (45) under four headings: government as leader; government as catalyst; government as establisher of infrastructures and delivery mechanisms; government as regulator of standards. The TECs and statutory bodies, such as CNAA, PCFC and UFC, will clearly continue to have an important part to play in the future.

The CNAA and the National Council for Vocational Qualifications (NCVQ) have already started work on rationalising and modifying their activities. The CNAA can now 'accredit' institutions which it is satisfied have appropriate arrangements for validating, reviewing and monitoring their own courses and are achieving appropriate academic standards. A number of accreditations have already been approved. The second initiative is the Credit Accumulation and Transfer Scheme (CATS) which is intended to facilitate entrance to higher education for those with non-traditional qualifications and to develop a system of transferable qualifications or credits. The implications of this approach for military courses has already been mentioned. There are a multitude of vocational and trade qualifications and NCVQ is attempting to create a framework within which these qualifications can be awarded and validated. Initially four levels have been proposed, but eventually it is hoped to embrace the higher level of professional qualification currently awarded by the professional institutes.

The most important new development for the future may be the Management Charter Initiative. The steering body for this Initiative, the Council for Management Education and Development (CMED), was formed in July 1987 at the instigation of the Foundation for Management Education, the CBI and BIM, in the aftermath of the publication of

the Handy and Constable/McCormick Reports. The aim of the Initiative is to promote high standards of modern management practice and business skill at all levels and across the economy. Membership of CMED has been drawn equally from business, the relevant academic bodies and the Government. CMED is seeking to progress on two fronts. The first of these is the drawing up of a Management Charter embodying the principles and undertakings which leading exponents of good management practice would expect to achieve in the development of their staff, particularly with regard to proficiency in business skills and the professionalism of management. The second is the creation of a formal professional qualification - Chartered Manager (with a ladder of interim qualifications) - the emphasis being on the individually planned blending of on-the-job development and experience combined with timely input of formal training or coaching.

CMED has issued a Code of Practice which it is hoped will be adopted by those organisations which now, or in the future, commit themselves to achieving the aims and objectives of the Management Charter Initiative. The Code of Practice is a rather watered-down version of the original draft but it has now been widely accepted, particularly by larger companies. Any initiative which generates commitment among companies for management education must be desirable, but it is doubtful if the Code of Practice will be the transforming instrument which was originally sought. Nevertheless, the Corps should consider active participation in the Charter Initiative. Its aspirations are in accord with those of the Corps in respect of management education and training.

The second initiative, the creation of a Chartered Manager, is less likely to be universally accepted and there has already been some resistance from many of the professional institutes and bodies such as AMED. A Chartered Manager, by definition, must be a member of a Chartered Institute. BIM has taken steps to obtain a Royal Charter, by petition to the Privy Council, in order to become the agency for establishing and developing the criteria for Chartered Manager status and supervising the assessment of individuals. CMED has set up working parties to look at the competencies required by Chartered Managers and steps have been taken to introduce the necessary courses and assessment methods for individuals to progress to Chartered Manager. BIM, in conjunction with the Open Business School has introduced a two-part Diploma in Management Practice which uses some of the Open Business School courses. It is premature to speculate about the outcome of this initiative, but if it is successful the Armed Forces will need to become involved, as personnel will undoubtedly aspire to Chartered Manager status. In the meantime,

the Corps must continue to monitor these initiatives and be prepared to adopt those elements which are relevant to the needs of the Corps and to individual officers.

REFERENCES

- (1) E A Life, "Training for Management, a Historical View" in RN Rapaport, "Mid-Career Development", Tavistock Publications, 1974.
- (2) M Peel, "Management Development and Training", BIM, 1984.
- (3) Committee on Higher Education (Chairman: Lord Robbins), Higher Education: Report, Comd 2154, HMSO, 1963.
- (4) Lord Franks, "British Business Schools", BIM, 1963.
- (5) J Constable and R McCormick, "The Making of British Managers", BIM/CBI 1987.
- (6) Coopers and Lybrand Associates, "A Challenge to Complacency" NEDO/MSO, Nov 1985.
- (7) I L Mangham and M S Silver, "Management Training: Context and Practice", University of Bath, Jun 1986.
- (8) C Handy, "The Making of Managers", MSC/NEDC/BIM, Apr 1987.
- (9) D E Hussey, "Management Training and Corporate Strategy", Pergamon Press, 1988.
- (10) C Handy, C Gordon, I Gow and C Randlesome, "Making Managers", Pitman, 1988.
- (11) A Mumford, G Robinson and D Stradling, "Developing Directors", MSC, Jan 1987.
- (12) G Wills, "Creating Wealth Through Management Development", MCB University Press, 1988.
- (13) I Cunningham, "Developing Chief Executives", Ashbridge Management College, Nov 1986.
- (14) K Barham, J Fraser and L Heath, "Management for the Future", FME/Ashridge Management College, Mar 1988.
- (15) R Garratt, "The Learning Organisation", Fontana, 1987.
- (16) Financial Times Survey, "Management Education and Training", Financial Times, 25 Mar 1988.
- (17) "Management Education", The Times Higher Education Supplement, 25 Mar 1988.
- (18) B James, "The Role of the MBA in the UK" Industrial and Commercial Training, Vol 19 No 5, Sep/Oct 1987.
- (19) J Peters, "The 'New MBA' - What it Means for Managers", Business Education, Vol 9 No 1, 1988.
- (20) S J Paliwoda and A C Harrison (Ed), AMBAs "Guide to Business Schools", Pitman, 1988.
- (21) A Study of Education in the Army (Beach), Final Report, Dec 1984.

- (22) Maj Gen J A M Evans, "The Case for the Scientific Soldier", British Army Review, Vol 88, Apr 1988.
- (23) Review of Officer Training and Education (ROTE), Final Report, Dec 1985.
- (24) Review of the Officer Career Structure (ROCS), Final Report, Oct 1986.
- (25) P R Coster, "Training for Senior Management Study", Cabinet Office (Management and Personnel Office), 1984.
- (26) P R Coster, "The Civil Service Senior Management Development Programme", MEAD, Vol 18 Part 3, Autumn 1987.
- (27) G Surtees, "The Making of Defence Managers", Civilian Management (Training) MOD, Apr 1988.
- (28) A Mumford (Ed), "Handbook of Management Development", Gower, 1986.
- (29) B Taylor and G Lippitt (Ed), "Management Development and Training Handbook", McGraw-Hill, 1983.
- (30) J Beck and C Cox (Ed), "Advances in Management Education", Wiley, 1980.
- (31) C L Cooper (Ed), "Developing Managers for the 1980s", MacMillan Press, 1981.
- (32) M Easterby-Smith, "Evaluation of Management Education, Training and Development", Gower, 1986.
- (33) A C Hamblin, "Evaluation and Control of Training", McGraw-Hill, 1974.
- (34) T W Leggatt, "The Training of British Managers", The Institute of Manpower Studies, HMSO, 1972.
- (35) R Whitley, A Thomas and J Marceau, "Masters of Business? Business School and Business Graduates in Britain and France", Tavistock Publications, 1981.
- (36) R M Hogarth, "Evaluating Management Education", Wiley, 1979.
- (37) P Forrester, "A Study of the Practical Use of the MBA", BIM, 1984.
- (38) P Forrester, "The British MBA", Cranfield Press, 1986.
- (39) K Ascher, "Masters of Business. The MBA and British Industry", Harbridge House Europe, Sep 1984.
- (40) A Mant, "The Experienced Manager: A Major Resource", BIM, 1969.
- (41) B Griffiths and H Murray, "Whose Business? A Radical Proposal to Privatise British Business Schools", Hobart Paper No 102, IEA, Jun 1985.
- (42) P Benjamin, "Europe Discovers the 'Golden Passport'", Business, Feb 1987.
- (43) D Manasian, "Degrees of Confusion", International Management, Jun 1988.

- (44) "Higher Education: Meeting the Challenge", Cm 114, HMSO, Apr 1987.
- (45) M Beck, "Positioning Managers for the Future - The Role of the Government", Industrial and Commercial Training, Vol 19, No 6, Nov/Dec 1987.

CHAPTER 3

THE NEED FOR MANAGEMENT EDUCATION AND TRAINING

3.1 INTRODUCTION

The lack of consensus about a satisfactory definition for 'management', or managerial activity, was highlighted in the first chapter and some of the more common approaches which have been used were mentioned. Although each of these approaches helps to give an understanding of what constitutes good or effective management, none provides the definitive answer. It is, however, possible to identify a number of essential features of managerial work. It is complex and variable; it involves ordering and coordinating the work of others, but to do this a manager requires similar order and coordination in himself; managers frequently deal with unprogrammed, as opposed to programmed, problems; managers need to be able to move and work across technical, cultural and functional boundaries and this demands adaptability and an ability to learn quickly. Few individuals are endowed with an abundance of the skills needed for these diverse activities when first embarking on a managerial career. Some of the skills can be acquired or developed as a result of experience and maturity; others require training. Even for the most gifted, training can have an important role to play as it can hasten the process of learning.

But to what extent is civilian management theory and practice transferable to a military setting and what is the training to consist of? Whilst there are many similarities between military and civilian organisations, there are also differences. Both are concerned with the efficient and effective use of resources (manpower, materiel, machinery and money) and this involves the same basic functions of planning, organising, coordinating, directing and controlling. Indeed, recent financial initiatives have served to bring the operation of military and civilian organisations even closer together. Both must operate within defined organisational structures, although these will often differ quite considerably given their different roles or tasks. Military organisations are normally hierarchical and rigid in structure while many civilian companies have moved toward more flexible structures, including autonomous work groups. Organisational theory and behavioural science, or human relations theory, are obviously relevant areas for study in this context.

The differences which exist tend to be cultural ones of style and attitude. The military, for example, retains an essentially authoritarian leadership style, although some indications of change towards the more democratic, consultative approach of industry may be discernible in some situations. Similarities are, of course, most marked in the logistic Corps, such as RAOC, which employ large

numbers of civilians. For these many of the best civilian management practices and techniques are entirely appropriate, provided the inherent differences are not completely ignored.

This chapter will look in more detail at the management training required by RAOC officers. The arguments and justification for management training will be examined and the implications for both the organisation and individuals within the organisation will be discussed. This will, in turn, lead to a more comprehensive discussion of the content and methodology of management training. The need for graduate and post-graduate education will be looked at as a separate issue at the end of the chapter, although there is a clear link with management training as the overwhelming majority of post-graduate courses studied by RAOC officers are management related.

3.2 REASONS FOR MANAGEMENT TRAINING

In an organisation as large and as complex as RAOC it may appear to be self-evident that those in managerial positions need to be well trained. There is, however, considerable debate about the sort of training that is required. Similar discussions centre on the duration, frequency, cost and effectiveness of management training. Some of these areas will be examined in more detail later. Notwithstanding the uncertainty which surrounds many aspects of the subject, management training is undoubtedly a growth area and there has been an enormous increase in the provision of this training in recent years. Even so UK still lags behind many of its competitors. A recent survey into management training, carried out by Bath University (1), revealed that over half of all UK companies make no provision for management training and of these that do expenditure varied between £358 and £750 per annum.

The pressures for management development stem from a combination of both organisational and individual pressures:

Organisational Pressures. Any organisation must ensure that it has an effective management structure and sufficient managers of the right calibre to achieve both its current and future objectives. Constant changes in environmental factors demand that this must be a continuous process. While some organisations prefer to recruit new personnel to provide the appropriate skills and expertise, many adopt a policy of developing their own managers to ensure that their current shortcomings or problems can be solved and that there is provision for future growth. This includes ensuring that there is planned and effective management succession at all levels. Although

the Services have a fairly well-defined manpower planning policy, other aspects of Service life bring their own problems. The frequency of postings and the wide variety of appointments which officers may be required to fill at any given age or rank creates a considerable training burden. For most new appointments some element of training is essential, even if in many cases this is predominantly on-the-job training. At this stage a distinction must be drawn between organisation development and management development. The former is concerned with the beliefs, attitudes, values and structures of organisations. It is, therefore, a group activity; unlike management development which is concerned primarily with the individual.

Individual Pressures. Training to satisfy purely organisational needs is unlikely to be entirely satisfactory. Full participation by the person or persons requiring development is necessary at all stages; in the diagnosis of the problem and in the prescription and follow-up. An individual is likely to be concerned with a number of aspects of his own managerial development. These may include:

- a. Improving his current performance or increasing his contribution as a manager.
- b. Enhancing his future promotion opportunities.
- c. Developing skills to facilitate a transfer from one specialist role to another in the same rank or grade.
- d. His growth as a person.

It is now widely accepted that the most effective learning takes place when the emphasis is on self-development - when the individual takes responsibility for his own learning. Real development is most likely to take place when the individual sees for himself the need to modify his behaviour, change his attitudes, develop new skills, improve his performance or prepare for a different role. Ideally there will be no conflict of interests between the requirements and aspirations of the organisation and those of the individual, but this will only be possible if clearly defined objectives and policies exist for both organisation development and management development.

3.3 DIAGNOSING MANAGEMENT TRAINING NEEDS

Organisational Needs. At the strategic level it is necessary to ascertain if there are any shortfalls in the performance of the organisation which can be attributed to ineffective performance on the part of some managers. In addition some analysis of future developments is important to ensure that likely changes can be satisfactorily catered for. In the Services in general, and RAOC in particular, this is achieved through planning and policy documents, Charters and the setting of objectives at all levels. Comprehensive feedback on performance is provided by, for example, management accountants and, more recently, the Quarter Master General's (QMG) Financial Management Information System (FMIS) initiative. At the manpower planning level it is necessary to ensure that the quantity and, more importantly, the quality of personnel is sufficient for both current and future requirements. There are a number of methods for ensuring that organisational needs in respect of manpower can be satisfied. The majority of these are well developed in the Services and in RAOC. They include job evaluation or analysis (job specifications and job descriptions are important for this purpose), a system of performance appraisal (the Confidential Report system) and the assessment of potential. The latter is to some extent covered in the Confidential Report system and by selection procedures such as the Staff/Promotion examination and the GMAT assessment for postgraduate management training. These methods are supplemented from time to time by ad hoc studies. Much of this information is available to the RAOC Officers Careers Committee, which has responsibility for advising DGOS on the policy to be adopted for career planning and training of RAOC officers, and to selection and promotion boards at all levels. Frequent and regular review is an important feature of these procedures so that trends can be identified at an early stage and corrective action initiated.

QMG Corporate Plan. In general terms, organisational needs appear to be reasonably well catered for in the current procedures. There are, however, a number of significant changes being implemented which will have major implications for organisational development. The most important of these is the QMG's Corporate Plan. Economic pressures on the Defence budget have led to greater awareness of the need to achieve value for money and this has led, in turn, to some restructuring or rationalisation and to the introduction of Responsibility Budgets and contractorisation. It has also given rise to the introduction of the QMG's Corporate Plan, which adopts a proactive, as opposed to reactive, approach to the QMG's area of responsibility. This new management strategy divides the area of responsibility into eight functional areas and DGOS is required to

take the lead in respect of Ammunition, Fuels and Rations, Clothing and Textiles and General Stores. The emphasis on commodity areas, which sometimes cross traditional cap-badge divisions, will lead to new operating procedures, which are likely to influence training requirements. New managerial skills in subjects such as strategic or corporate planning, budgetary control and operations management will be needed. The QMG's Corporate Plan is itself part of a much wider New Management Strategy the primary aim of which is to secure better value for money from the Ministry of Defence's running costs through the closer alignment of financial accountability with line management responsibilities.

Individual Needs. Individual needs are in some respects more difficult to identify and will depend on a wide variety of factors. These factors include age, rank, experience, current or proposed appointment, previous training and much more. Although career patterns of RAOC officers vary considerably, some aspects of training are standardised. Policy for the training of RAOC officers commissioned from the Royal Military Academy, Sandhurst (RMAS) and the younger, late entry officers commissioned from the ranks is laid down in DGOS Training Instruction No 2 - Officers' Training. This includes the policy on management training. DGOS Training Instruction No 2 recognises the progressive and continuous nature of an officer's development and divides the training into four phases. Formal management training is only mentioned in Phase 3 (ages 24-26 until promotion to Major) with recommendations for updating and informal training in Phase 4 (Majors and above). Because the Training Instruction is, necessarily, very generalised, as a policy document for management training it only provides brief guidelines. No attempt is made to define specific skills or to quantify the requirement for training.

Knowledge, Attitude and Skills. Management is the purposeful use of resources and effectiveness in management implies ability to achieve desirable results. An appropriate repertoire of knowledge, attitudes and skills is essential, although the optimum combination of these will vary according to the nature of the organisation, and the level of responsibility or function. The constituent parts have been defined as follows:

"Knowledge consists of retained observations, facts and interrelationships and the ability to manipulate the various elements. It is rooted in our intellect. Attitudes are our predispositions to act and react in predictable ways. They are often emotionally rooted. Skills are the ability to do things, to use the knowledge, to mobilize personality resources in order to carry out certain activities, to accomplish specific tasks" (2).

The way in which knowledge, attitudes and skills are acquired varies greatly. Knowledge is acquired through a cognitive, intellectual process. Attitudes are acquired through a more affective, emotional process, sometimes described as experiential conditioning. Skills, on the other hand, are acquired through practice. Because management is a practical subject, it is the skills element of the conceptual framework which is invariably given the main emphasis in management training. Ideally training should place emphasis on all three areas as they are so closely interrelated. Although the discussion of management training needs which follows refers primarily to skills, the importance of the knowledge and attitudes which are reflected in these skills must be borne firmly in mind.

At different stages in their careers officers have different management development needs. Early in their careers they are more likely to be involved in technical activities and they take on more supervisory or leadership responsibilities as they progress. This distinction between general management skills and technical or specialist skills is fundamental. All managers require general skills, where the emphasis is on personal and interpersonal skills and the management of human resources. The requirement for technical or specialist skills, which rely more on techniques, such as inventory control, Work Study, information technology and so on, will vary according to the appointment held. Margerison (3) found that the two types of activities - technical and managerial - had an almost straight-line relationship to each other in the course of a manager's career. Figure 3.1 shows how as a manager progresses he requires less technical skills but more managerial skills.

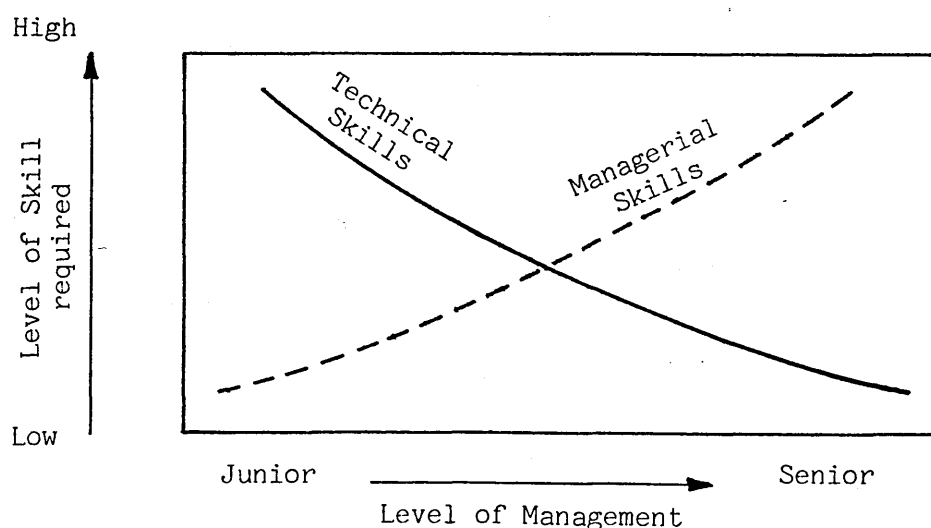


Figure 3.1 - Changing Pattern of Skills

A simple scheme for considering the complex variety of management skills was suggested by Katz (4). He identified three basic skills which are as follows:

- a. Technical Skills. This group encompasses the specialist skills and knowledge related to the individual's profession or specialization. Decision-making, planning, scheduling, budgeting and controlling might be included in this group. In an RAOC context it will also include inventory control, warehousing and the ammunition, petroleum, food supply and ADP functional tasks.
- b. Human Skills. These Katz defines as "the executive's ability to work effectively as a group member and to build cooperative effort within the team he leads". Communicating, motivating, selecting and developing people might be included in this group.
- c. Conceptual Skills. Katz saw these as being "the executive's ability to perceive the significant elements in any situation and this was achieved through his ability to see the enterprise as a whole". The development of a 'helicopter mind' (ie the ability to rise above a problem and see it in context) and the ability to examine the relationships within the organisations are features of this group.

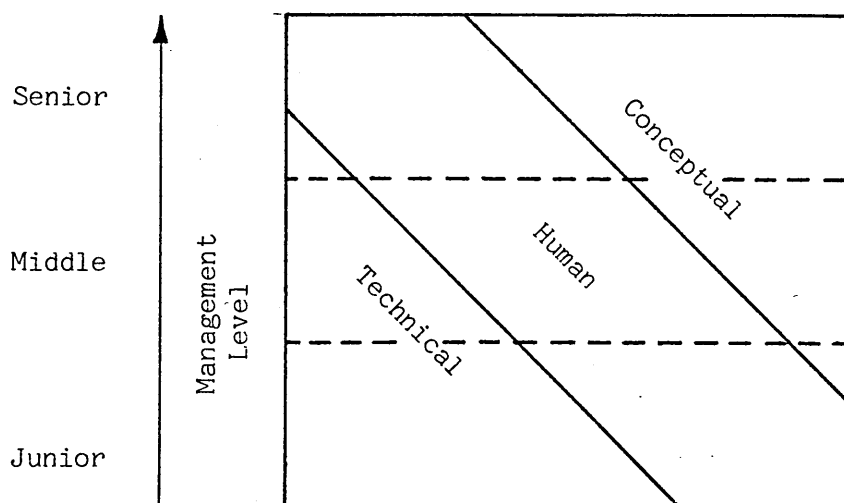


Figure 3.2 - Evolving Needs for Skills

Again, as a manager's or officer's career develops so the required mix of these skills is likely to change. This is illustrated in Figure 3.2.

Assessing Individual Needs. There are a variety of methods for carrying out a training needs assessment. These include structured interviews, questionnaires or surveys, behavioural and psychological tests and repertory grid techniques. Having carried out the training needs assessment, the findings can be used either to ensure an individual receives the training he needs or to design a training course for a number of participants with similar needs.

In order to carry out a training needs assessment some clear idea of what constitutes the desired end product is necessary. A modelling approach is often adopted for this purpose. One such model is that devised by Jones and Woodcock (5). This model of General Managerial Competency, which is shown in Figure 3.3, has as its core the individual manager. Around this core are placed the management of subordinates, managing relationships between departments in the same organisation and, finally, relationships with external organisations. Some of the dimensions of the model are discussed below:

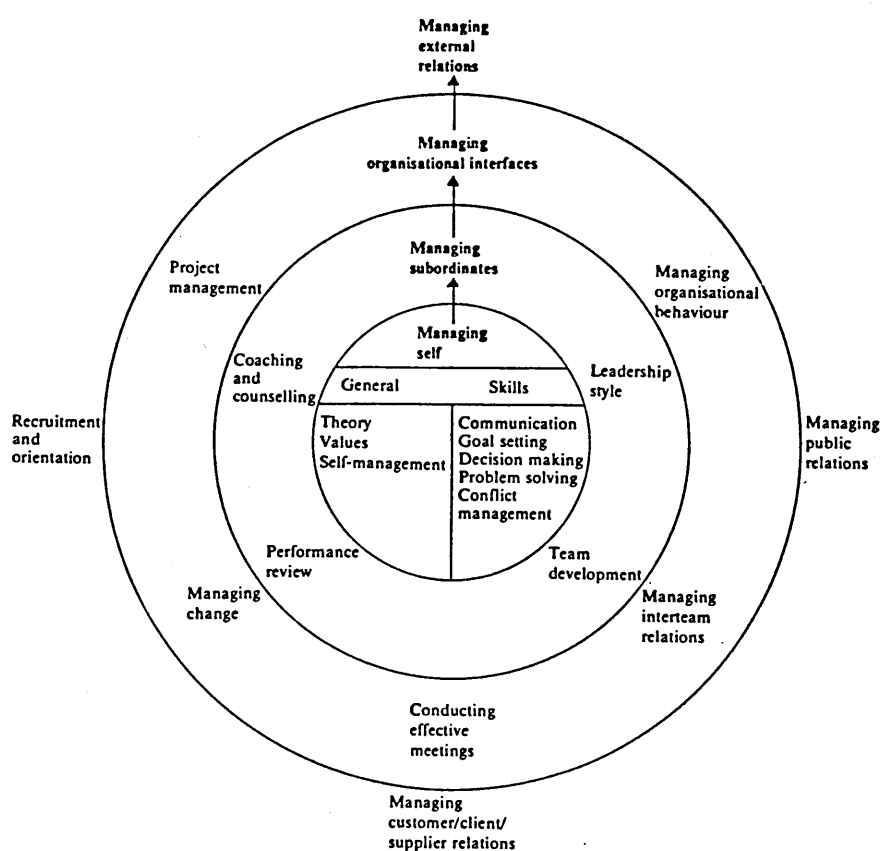


Figure 3.3 - Model of General Managerial Competency

- a. Managing Self. This is fundamental and Jones and Woodcock identify three general characteristics and a number of vital skill areas. A knowledge of managerial theory and a sound values system are necessary and the manager must accept responsibility for managing his own time, stress and career. The vital skill areas are communication, goal or objective setting, decision making, problem solving and conflict management.
- b. Managing Subordinates. This is the second ring of the model and involves leadership, team development, performance review and developing and nurturing individuals through counselling and coaching.
- c. Managing Organisational Interfaces. This can include both informal exchanges and those demanded by the bureaucratic structure and political networks of the organisation. The effectiveness areas listed include managing organisational behaviour (the effective manager seeks to influence the values, goals, structure and relationships of his organisation), managing interteam relations, managing change, project management (especially where cross-organisational boundaries are involved) and conducting effective meetings.
- d. Managing External Relations. This refers to the areas of responsibility the manager has in respect of people outside the organisation, such as clients, suppliers, potential employees and the general public.

The various factors are not all of equal importance and many change with time or with changes in rank or appointment. The model does not include many of the technical skills which are available to managers and which can be applied to many of the elements of the model in order to achieve a satisfactory performance or outcome. Similarly, the model does not address itself to the stage at which certain skills need to be developed or to the degree of knowledge which is required. These additional factors must obviously be considered when relating the model to RAOC officer management training needs. This will be discussed in more detail in a later chapter, as the model was used as a basis for part of the survey which was carried out to gauge opinion about training needs.

3.4 MANAGEMENT DEVELOPMENT METHODS

There are a bewildering number of methods available for conducting successful management development programmes. Some of these are intended to be used for 'on-the job' training whilst others can only be made available 'off-the-job'. Many methods are applicable to both situations. Some of the principal methods are discussed below:

- a. In-House Training. This type of training covers all courses organised and conducted internally within a unit. The trainers may be internal and/or external.
- b. External Training. This normally involves sending employees to outside courses that cannot be mounted within the organisation. It may include academic degree courses, public seminars and conferences and many other continuing education courses. RAOC officers attending courses at other military schools and colleges could be included in this category.
- c. Training Centre. This is an organisation - based training facility which is usually restricted to in-house training. The RAOC Training Centre and, in particular, the School of Ordnance provides this type of facility for the Corps.
- d. Performance Review. Appraisal, or the confidential report system, should be a strong management development activity, particularly when it is used to provide guidance and direction. To be effective it must be goal-orientated and not focus only on past performance. Ideally it should also require an assessment of the training needs of an individual.
- e. Job Rotation. In Service life this is usually confined to postings to a new appointment every two or three years. Rotation within a unit is rarely considered, although it can sometimes follow as a result of promotion within a unit. Postings are themselves regarded as a strong feature of career development, although the individual may not have a great deal of control over his own development.
- f. Secondments. This refers to temporary assignments, usually within other organisations. It is not a strong feature of service life although some individuals are occasionally attached to civilian companies for short periods of time.

g. Using Consultants. In a management development context this normally means bringing in outside trainers to work in management development activities. External lecturers are often used to run specialist courses or contribute specific expertise within a larger programme.

h. Mentoring. This involves assigning junior managers to senior managers who then have a teaching, advising and counselling responsibility. It is not widely used in the UK. The danger of mentoring is that it can become little more than the selection of proteges and sponsorship.

i. Counselling. This management development activity consists of offering people help with their personal concerns. It is intended to help to provide a bridge between organisational goals and the life situations of individuals. At the lowest level it is good man-management, but at higher levels often requires a great deal of expertise.

j. Coaching. This consists of on-the-job assistance by a more senior manager and/or by specialist trainers. It is job specific and individualised instruction. It can also refer to delegated work or special tasks which are intended to help develop the individual.

k. Project Groups. This is a widely used method for carrying out special assignments. The creation of cross-department groups for problem-solving can have benefits both for the organisation and for individual participants who learn from the cross-pollination that occurs in group deliberations. Action Learning is sometimes included in this category.

l. Seminars. These are events which provide an opportunity for pooling experience and ideas. Conferences are often intended to fulfil a similar purpose.

A distinction can be made between the management development methods discussed above and the training methods which may be used in both in-house and external training courses. Most people will be familiar with the main characteristics of each method and they do not require detailed description. A combination of lectures, films or videos, case studies, business games or simulations, written assignments or projects and small group or team activities are likely to feature in most training programmes.

Several new methods are beginning to contribute to management development. These include Open and Distance Learning and the use of new technology, including computers:

Open And Distance Learning. Although sometimes used synonymously, the terms open and distance learning have somewhat different meanings. One way to distinguish between the two is to associate 'openness' with removing educational constraints and 'distance' with removing administrative constraints. Thus distance learning involves separation of the tutor and learner, involves the use of at least one form of media (print, video, computer etc), needs a delivery system and is usually, but not exclusively, suited to the solo learner. Open learning, on the other hand, gives the individual a choice about learning goals, the sequence, pace or depth of learning and the learning processes to be used. Most examples of open and distance learning do not meet the conditions of complete 'openness' or 'distance'. There has been considerable enthusiasm for open and distance learning as a medium for management training. There are two main reasons for this. A facility where a manager can learn at times and at a pace which suit the demands of his job is very attractive both to the individual and to his organisation. The teaching methods themselves are also likely to appeal more strongly to a mature, experienced person who may be reluctant to attend a long course of formal study. A number of universities and polytechnics are now offering an expanding range of courses, some of which lead to higher level degrees. The possible applications of this type of training for RAOC officers will be discussed in a later chapter.

New Technology. The success of open and distance learning relies to a considerable extent on the development of new technology. The most widely used media include video, computer output (in the form of text, graphics and limited sound), and interactive video (where computer generated output is linked with video sequences). Computer-based learning (CBL) is still in its infancy but it is already providing many exciting applications in management training, including simulations, action mazes and management games of surprising sophistication. The development of more advanced authoring languages and systems are an important element of this new technology.

Learning Styles. When considering management development methods, some knowledge of adult learning styles is useful as individuals differ in their capacity and aptitude to learn in a specific way. Kolb (6) has identified four stages through which learning passes:

- a. Concrete experience.
- b. Observation and reflection.
- c. Forming abstract concepts.
- d. Testing new ideas through experimentation.

This approach has important implications for selection and training. Ideally all officers should be capable of learning from each of these situations and a management development programme should offer the widest possible range of opportunities for learning. Unfortunately many people fail to reflect on their experiences and thus fail to learn from them. Others are not capable of reflecting on their experiences in order to formulate a concept that explains what occurred by relating it to previous experiences. Having explained what happened it should be possible to predict likely outcomes if certain behaviour is repeated in other situations. Learning is not complete until these notions are tested in other situations. The testing constitutes another concrete experience which begins the learning cycle again. The implications for training of this experiential learning theory include the following:

- a. Learning is more effective when it is an active rather than a passive process.
- b. Problem-centred learning is more enduring than theory-based learning.
- c. Two-way communication produces better learning than one-way communication.
- d. Individuals will learn more if they share control over the learning process with the instructor or tutor.
- e. Learning is most effective when thought and action are integrated.

Evaluation. Perhaps the most neglected aspect of management training at all levels and in all organisations is the evaluation of training. Too often this goes no further than the end of course critique or "happiness sheet" and rarely addresses itself to fundamentals. In any systematic approach to training it is an essential stage in the process, as it may prove the value of the training or provide feedback for improving it. Evaluation may also be required for other reasons and these are likely to reflect the differing interests of those

involved in the training: the trainees, the trainers and the policy makers. There is no single instrument which can determine the success, or otherwise, of a training programme for all of these interested parties. Management training is particularly difficult to evaluate because it is not purely skill-based; it also deals with values and attitudes. Research methods in these areas are often imprecise and subjective. Evaluation can centre on one of a number of areas. These include policy, course programmes and methods.

Easterby-Smith (7) suggests a framework for evaluation which looks at the context of a programme or event, the administration, including selection, briefing and follow-up activity, the inputs, the processes, the outcomes and, perhaps, any organisational change which may result. He also highlights many of the data collection media and methods which may assist in the evaluation process. The media include observation, records and informants (who may be participants or other interested parties such as senior management or sponsors). Data collection methods range from objective tests, to scales (attitude and rating scales), questionnaires, self-reports, interviews and repertory grid techniques.

As was pointed out earlier, very little effort has previously been made to evaluate the management training which has been carried out in the Corps. This study attempts to rectify earlier omissions. It is the first comprehensive and objective review of the subject since 1969, although many minor modifications have been implemented in the intervening period to reflect changing training needs as a consequence of changes to the role, organisation and deployment of RAOC.

3.5 WHY MANAGEMENT EDUCATION?

Much of the foregoing discussion is applicable to both management training and management education. However, in Chapter 1 a distinction was drawn between education and training. Training is concerned with the teaching of specific, factual subject matter and, often, practical skills. Education, on the other hand, is concerned with broader subject matter of a conceptual or theoretical nature. It is an intellectual activity and the acquisition of knowledge and understanding is its main objective.

There is a body of opinion within the Army that holds that there is no place for training officers other than for purely utilitarian reasons dictated by future job requirements. The opposite view holds that formal education is a good thing in itself, bringing professional and personal development to the individual and benefits to the employer. General Hackett, in a lecture at RMCS, supported the latter view when

he said "The general cultivation of the mind is a desirable end in itself. Man is a rational animal and becomes a better and more competent man by the development of his special capacity, which is rational thought. Learning to think, to reason, to compare, to discriminate, to analyse will put a man in a better position to practice any profession at all. Typical pursuits in which a man of cultivated mind will be more useful than a man whose education has been confined to professional skills include those of the statesman, the lawyer, the physician, the engineer. They also include the soldier". Management education enjoys the additional benefit of combining a strong vocational element to those features highlighted by General Hackett.

The benefits of management education are described by Paliwada and Harrison (8) as follows: "Much of the benefit from a business school course comes from the exposure of the student to a concentrated group of highly intelligent people from a variety of backgrounds. Taken together with the variety of ages and levels of experience, this leads to a constant dialogue between those committed to an idealistic view of social and economic change and those who have a commitment to existing structures. Primarily, however, the result is a continuing intellectual stimulus, forcing the individual to present arguments cogently and concisely and to subject these to criticism by fellow students". To this might be added some of the more pragmatic benefits highlighted in a publication issued by the Association of Graduate Careers Advisory Services (9). These include the acquisition of specific skills, the prospect of large salaries, career mobility and the opportunity to make useful contacts (presumably with potential employers!).

There are, of course, many other reasons why management education should be regarded as being of great importance in the career development of RAOC officers. Some of these are tangible and pragmatic while others may be intangible or subjective. At a superficial level there are organisational pressures to maintain a supply of managers of the right calibre to achieve both current and future objectives and this demands effective succession planning.

There are, however, wider issues to be considered. Recruiting, retention and, eventually, resettlement of officers can be affected in a positive way by the opportunities which are offered for management education (as well as other types of education or training). A recent NEDO report (10) states that "The labour market in Britain for young people is moving from surplus towards shortage. Between 1987 and 1995 the number of 16-24 year olds in the labour force is projected to fall by 1.2 million, a decline of one-fifth - with a decline of 23 per cent

in the 16-19 year old age group". At the same time the planned expansion of higher education will create a growing demand for graduates (11). The implications of these trends for officer recruiting are obvious. The Army has already initiated a study of the problem - 'Manning and Recruiting in the Lean Years of the Nineties' (MARILYN) - but any recommendations are likely to be on a global basis and individual Corps may suffer disproportionately. RAOC could strengthen its hand by emphasising and actively supporting the opportunities for officer to obtain universally recognised academic qualifications.

Recruiting. The changes in society, in general, and the Army, in particular, make it essential that the Army recruits academically well-qualified officers who have the intellectual ability to cope with the increasingly complex technological military environment. The Review of the Officer Career Structure (ROCS) report (12) made a number of observations and recommendations in this context. Unlike many Armies we have never had an all graduate Officer Corps. However, in recent years a significantly higher proportion of officers leaving RMAS have degrees and this trend certainly applies to RAOC, where approximately 50% of newly commissioned young officers have degrees. There are also excellent opportunities for suitably qualified officers to read for in-Service degrees, especially at RMCS. The ROCS report emphasises the need to take full advantage of these opportunities and points out that some influence can be brought to bear on the subjects studied for in-Service degrees, thus ensuring their relevance to the Army's special needs. In an RAOC context qualifications in management science, business studies and information technology are, perhaps, most desirable. Degree training has now achieved the importance it merits and RAOC must ensure it is given continued support.

Retention. Having recruited and trained suitable officers it is vital that they are given varied and satisfying career opportunities if they are to remain in the Corps. This must of necessity include a great deal of further training and training must be continuous and progressive throughout an officer's service. This is particularly important in a managerial context as promotions bring changing and increasing responsibilities. RAOC has always recognised the importance of this further training at the Captain/Major level. A proportion of the officers not selected for Staff College training have been nominated each year to study for a post graduate qualification in management subjects. Whilst this has proved to be an excellent way of ensuring the Corps has a wealth of expertise in this area, it has also given many officers, who might otherwise have become disillusioned about their career prospects, an opportunity to enhance their employability and job-satisfaction. By gaining a universally

recognised academic qualification they have also significantly improved their chances of finding satisfactory employment when they leave the Army. The importance of this "carrot" should not be underestimated in a period of high premature voluntary retirement (PVR), largely caused by dissatisfaction with conditions of service. Indeed a strong case can be made for expanding the opportunities for officers to obtain professional qualifications.

Best Practice. The importance of having well-qualified officers has already been mentioned. RAOC employs a very large number of civilians and most officers will at some stage in their career have responsibility for some of these civilian employees. They must, therefore, be fully conversant with normal civilian management practices. By the same token, many of our units and installations operate on the same lines as civilian companies in the supply, warehousing and distribution fields. Many of their procedures are directly applicable to our task and it is entirely appropriate that our officers should be trained to operate similar procedures. Post graduate training, in particular, gives officers the opportunity to gain the most up-to-date expertise which can then be utilised to ensure that the Corps operating methods are efficient and effective. Post graduate training is a mind-broadening exercise and affords an opportunity for officers to gain experience of and create links with the commercial world at an important stage in their career, when a narrow, parochial outlook might be disadvantageous to both the individual and his organisation. Officers, by virtue of the Service experience, often have much to contribute to their fellow students from commercial or industrial backgrounds so a two-way link undoubtedly operates.

There are powerful arguments in favour of continuing, and perhaps expanding, both graduate and post graduate training. Graduates provide an essential pool of intelligent officers who are capable of further growth and development. Post graduate training provides the expertise which is vital at the middle and senior officer level, especially in the management field. Training is, however, expensive in terms of the limited resources of time, money and manpower. Individual and organisational pressures and needs must be carefully balanced. Above all the knowledge and skills which have been acquired must be properly utilised, and there is some evidence that this is not always achieved. In some cases over-training can be equally damaging as failure to provide adequate training because it can lead to raised expectations and then disillusionment. How the Corps currently uses its university trained personnel will be discussed in a later chapter. Alternative ways of training officers who require specialist management knowledge and skills will also be examined.

REFERENCES

- (1) I L Mangham & M S Silver, "Management Training: Context and Practice", University of Bath, Jun 1986.
- (2) B Hawrylyshyn, "Management Education - A Conceptual Framework" in "Management Development and Training Handbook" (ed) McGraw-Hill, 1983.
- (3) C J Margerison, "Managing Career Choices" in "Handbook of Management Development" (ed) Gower, 1986.
- (4) R L Katz, "Skills of an Effective Administrator", Harvard Business Review, Sep/Oct 1974.
- (5) J E Jones & M Woodcock, "Manual of Management Development", Gower, 1985.
- (6) D A Kolb, "Experiential Learning", Prentice-Hall, 1984.
- (7) M Easterby-Smith, "Evaluation of Management Education, Training and Development", Gower, 1986.
- (8) S J Paliwada & A C Harrison (Ed), AMBA's "Guide to Business Schools", Pitman, 1988.
- (9) P Raderecht, A Basset & A James, "Postgraduate Business Schools", Association of Graduate Careers Advisory Services, Oct 1987.
- (10) "Young People and the Labour Market", NEDO/TC, Jul 1988.
- (11) J O'Leary, "Improving by Degrees", Times Higher Educational Supplement, 17 Jun 1988.
- (12) Review of the Officer Career Structure (ROCS), Final Report, Oct 1986.

PART TWO

THE RESEARCH

CHAPTER 4

CURRENT TRAINING

4.1 INTRODUCTION

The need for progressive and continuous management training, which will meet the needs of both the Corps and the individual officer, has been emphasised. The specific mix of knowledge, skills and attitudes required by an RAOC officer will change with successive promotions and as he moves from one appointment to another. Each stage in his career is likely to place new demands on the individual officer; he will need to acquire additional knowledge and skills or update and refresh those learned earlier in his career. At all stages a satisfactory balance of military, technical and management expertise must be maintained and this will frequently require more training. In the management context, the experiential nature of the subject has been stressed and some of the wide variety of management development methods have been described. Whilst course-based training plays a major role in the management development process, much of the necessary training can also be obtained in less formal ways. Although this chapter will look mainly at the formal training which may be undertaken by RAOC officers, the importance of 'on-the-job' training must not be overlooked. A satisfactory policy for management development must seek to optimise the combination of both formal and informal training.

Management training, in the wider sense, must inevitably form a part of virtually every course that an RAOC officer attends, although it may not be acknowledged as such in the course syllabus. It would not be practicable to explore all such courses in order to identify the management training element. This chapter will concentrate on the current management training - of both a general and technical nature - which is undertaken at the School of Ordnance or on external courses, including those at universities. It will look at current Corps policy for management training and will describe the pattern of training received by the majority of RAOC officers. Where possible the current training will be evaluated in the light of the conceptual framework for management training outlined in Chapter 3.

4.2 MANAGEMENT TRAINING POLICY

The main agency for determining management training policy in the Corps is the RAOC Officers' Careers Committee. That policy is laid down in DGOS Training Instruction No 2 - Officers Training, which is then modified from time to time by directed letters or instructions. The number of officers who may undergo long course training is largely governed by the training element of the Manpower Planning Target (MPT).

RAOC Officers' Careers Committee. The RAOC Officers' Careers Committee, which is established in accordance with RAOC Corps Instruction No 604, advises DGOS on the policy to be adopted for career planning and training of RAOC officers. The task of the Committee is, broadly, to balance the requirements of manning the RAOC with suitable, trained officers, with the need to ensure that individual careers are properly managed. It deals with a wide range of personnel and training matters and, therefore, exercises considerable influence over the duration, timing and content of management training, as well as the postings and career development of individual officers. The Committee selects officers for long RAOC courses, including postgraduate management training. The Committee meets twice yearly and a record of policy decisions are circulated after each meeting.

DGOS Training Instruction No 2 - Officers' Training. Overall policy, including the policy for management training, is laid down in DGOS Training Instruction No 2 - Officers' Training. The instruction outlines the policy for the training of RAOC officers commissioned from RMAS and the younger, late entry officers commissioned from Warrant rank. The training of regular officers commissioned from RMAS is conducted in four phases. During Phases 1 to 3, officers up to and including the rank of Captain are provided with both regimental and technical training. Phase 4 commences when officers are promoted to the rank of Major and training is provided to improve officers' management ability and to broaden their understanding of logistics. Responsibility for the implementation of the policy rests with a number of agencies including, of course, commanding officers. DGOS Training Instruction No 2 emphasises the progressive pattern of officers' training, while recognising that there will often be exceptions to the general pattern.

Manpower Planning Target (MPT). Within each year's MPT there is an element for training, but only up to the rank of Major. This training element determines the number of officers who may attend long courses in any given year. MPT 87 allowed for a total of 52 officers on training out of an MPT total of 1055 RAOC officers. In the rank of Major the allowance is 11. Any training not covered by the training element must be carried out in 'unit time'. That is to say, established posts remain unmanned for the duration of the course.

The current organisation for determining RAOC management training policy has been in operation for many years. It is well structured and has a good record of achievement. The system is under constant review in so far as the twice yearly meetings of the RAOC Officers'

Careers Committee provides a forum for discussing a wide range of training matters. Individual officers may submit constructive suggestions to the Committee (through the chain of command) and the Committee itself commissions many discussion papers and studies in order to ensure that the constantly changing training requirements of the Corps are catered for. Although DGOS Training Instruction No 2 is, of necessity, a very general document and cannot cater for all eventualities, it is amplified in policy directives which are issued whenever necessary. The system is not perfect. The personnel branch, in particular, is faced with numerous difficulties in applying the principles of good personnel management. On some occasions, expediency may have to override the best career planning intentions, or the wishes of the individual, and this is an accepted feature of Service life. One of the main areas of concern is the link between training policy and posting policy. In addition to indicating the qualifications and experience required for each post, job specifications should also stipulate the training which must precede the assumption of an appointment. These training requirements should then be reflected on posting orders, as is now being done in a small minority of cases. Similarly, there is some evidence that officers with specialist skills, usually acquired as a result of lengthy training, are not being used in appropriate appointments. There may, of course, be sound career development reasons for this in some instances, but it is by no means always the case. This point will be returned to later. It is also considered that more use could be made of the Confidential Report system to identify individual, and hence organisational, training needs. Finally, the training element of the MPT leaves much to be desired. If it cannot be increased, and further reduction is more likely, it may be necessary to find alternative ways to use the cover it provides.

4.3 PATTERN OF MANAGEMENT TRAINING

It is Corps policy that management training should be progressive and continuous, although the precise stages through which an individual officer passes will be determined by a number of factors. These will include ability, aptitude, motivation and (to some extent) luck. The model in Figure 4.1 shows the possible paths which an officer's career may follow. Each of the steps shown includes an element of management training or education. In addition he will continue his management development by short courses or on-the-job experience in both regimental and staff appointments.

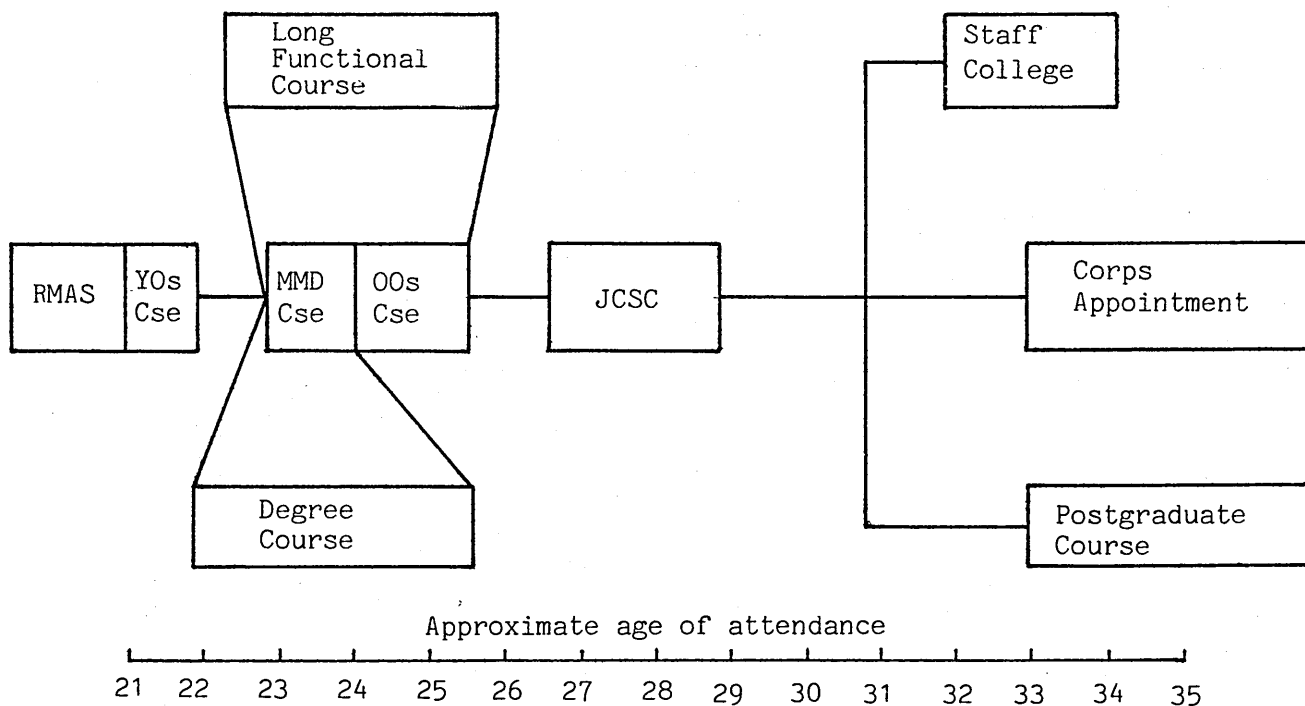


Figure 4.1 - RAOC Officers' Management Training Pattern

The importance of job experience, or experiential learning, should not be underestimated. Throughout his career an officer is exposed to a succession of individual management or leadership styles, as displayed by superior officers, peers and subordinates. Some of these will be more successful than others and this is likely to have an influence on the personal style adopted by the officer. Responsible officers are, of course, fully aware of this phenomenon and will take great care to establish high standards and set a good example for their more junior colleagues. Sound management training, however, demands that this is taken a stage further. A pro-active approach requires a positive attempt to inculcate the desired standards by coaching, counselling, delegating and through special tasks or projects.

This type of training must be supplemented by formal course-based training at appropriate stages in an officer's career. The stages at which formal management training is given may be influenced by a Corps or Army policy which requires officers to attend specific courses, and often to pass examinations, in order to qualify for promotion or selection for further training. Alternatively training may be required in order to give an officer the necessary knowledge or skills to carry out a specific specialist appointment. In some cases training may be developmental, in so far

as an officer wishes to acquire further skills in an area of personal interest for reasons of self-development or because he can see an application for the training at some, perhaps unspecified, stage in the future. RAOC provides management training, of both a general and technical nature, to meet all of these requirements.

Although Sandhurst, the Young Officers (YOs) course and early regimental appointments will provide an element of management development, it is unlikely that the young officer will receive any substantial training in either general or technical management subjects until he attends the Ordnance Officers (OOs) course. The exception to this would be an officer who holds a degree in a management related discipline on commissioning or who reads for an in-Service degree before attending the OOs course. The OOs course may be attended up to 28 years of age but not below 22 years of age.

The OOs course is preceded by a Middle Management Development course which lasts for three weeks. During this course senior Lieutenants/ junior Captains are taught a variety of general management concepts and techniques which are appropriate to Ordnance Services. The OOs course which follows that course is an introduction to the technical management of the Corps, in both peace and war, and provides an overview of the functional responsibilities of RAOC. Most officers will eventually go on to specialize in one of these functional areas and will attend the appropriate ammunition, petroleum, food supply or ADP long course, each of which has considerable managerial content.

The next stage in an officer's career pattern is devoted to training for promotion from Captain to Major and includes attendance at the Junior Command and Staff Course (JCSC). JCSC is currently attended between the ages of 26 and 29 years. A substantial proportion of officers in each age bracket will be selected to attend Staff College or to study for a postgraduate qualification at UMIST, the Cranfield Institute of Technology (CIT) or, more recently, at the Royal Military College of Science (RMCS). Officers who attend the Staff College are not, at present, eligible for a long management course. However, some management training is included in Part I of the Army Staff Course (ASC). The majority of formal management education and training is undertaken at the senior Captain/junior Major level and very little training is provided for Lieutenant Colonels and above.

Having looked very briefly at the general pattern of the current management training in the Corps, the study will now look in more depth and detail at some of the main management courses which RAOC

officers attend. Scheduled courses at the School of Ordnance will be examined first, before going on to consider those offered at external institutions, both military and civilian.

4.4 SCHOOL OF ORDNANCE

The courses to be run at the School of Ordnance each year are laid down in the RAOC Courses Programme. Courses run for RAOC personnel are sponsored by HQ DGOS and their frequency and duration are determined in consultation with a variety of units and headquarters. The actual programme is scheduled by the School of Ordnance to take account of the availability of accommodation, classrooms, instructors and other resources. The Management Wing of the School of Ordnance has responsibility for the teaching of both general and technical management courses, although in many cases guest lecturers, who are experts in their field, will augment the established instructors. Similarly, most of the Management Wing instructors also have an input to other courses.

General Management Training. The only general management training course run at the School of Ordnance for RAOC officers is the Middle Management Development (MMD) course. This course is mandatory for all officers holding regular commissions in the Corps in so far as the course precedes the OOs course and to all intents and purposes is regarded as part of the OOs course. Three or four MMD courses are run each year and two of these are linked to an OOs course. The other course(s) caters for non-regular officers and civilians of Executive Officer or equivalent status. The courses, which are intended to be participative and practical, are designed to introduce the student to some basic management concepts and skills. The course aim is "to improve the students managerial effectiveness through the application of the concepts and techniques of management appropriate to Ordnance Services". The course is divided into a number of themes or topics and these include; Concepts and Techniques, Human Resources and Individual Skills, Organisations, and Industrial Relations.

The MMD course only lasts three weeks and in the time available the course can provide little more than a grounding in some of the theories and practices of management techniques. The skills taught are aimed at improving the management techniques of all students and are not related to specific tasks or appointments. The annual throughput of officers is quite small, as the following figures indicate:

- a. 1984/85 - 7 military, 14 civilians
- b. 1985/86 - 18 military, 8 civilians
- c. 1986/87 - 24 military, 15 civilians
- d. 1987/88 - 41 military, 14 civilians

It is possible for an RAOC officer to receive no formal management training after attending the MMD course at, in some cases, the age of 25. Officers proceeding to the Army Staff course ('psc' officers) or to a post-graduate management course ('im' officers) account for only 50% of all officers in the rank Major to Brigadier, as Table 4.1 shows.

(a)

Table 4.1 - RAOC OFFICER QUALIFICATIONS

<u>Rank</u>	<u>'psc'</u>	<u>'im'</u>	<u>neither</u>
	%	%	%
Colonels and above	62	14	24
Lieutenant Colonels	30	30	40
Majors	14	30	56
Total (Major to Brigadiers)	22	28	50

Note (a) Based on 1986 Corps List.

Seminars. In order to try to satisfy some of the known training needs, the School of Ordnance runs a number of seminars or short courses each year. Recent seminars have covered topics such as: Introducing Change, Project Management, Information Technology and Time Management. Normally of very short duration (one to three days) these seminars allow an officer to be introduced to, or refresh his knowledge of, a specific management subject. Most of these seminars are well supported but in many cases it is doubtful if those most in need of the training are in attendance. The School of Ordnance also runs a programmed series of microcomputer courses for RAOC personnel and, on behalf of the QMG, for personnel involved

with the QMG FMIS. These courses are divided into basic awareness courses and more advanced ones which concentrate on one type of software eg database, spreadsheet or word processing. All of these courses are aimed at the non-specialist ADP officer and sufficient courses are on offer to ensure that everyone can become 'computer-literate'.

Technical Management Training. Technical management courses at the School of Ordnance concentrate on the management of equipment and spares. The courses are directed at officers who are holding, or about to be posted to, appointments requiring specific skills in provision or equipment management. Several modules of the OOs course also cover technical management subjects. The main courses are described below:

a. Officers Primary Provision Course. The Primary Provision course is of four weeks duration (twice a year) and covers three main themes with a number of supporting topics. The main themes are:

- (1) Provision principles and methods worldwide.
- (2) Statistical method and inventory control technology.
- (3) ADP in inventory management.

The supporting lectures cover; maintenance support planning, Technical Records Group, Army Cataloguing, Initial Spares Requirement (ISR) procedure, War Reserves, contract law, the Standard Priority System (SPS), commercial and Service interfaces and repair planning.

b. Officers Secondary/Tertiary Provision Course. The second provision course for RAOC officers is the Secondary/Tertiary Provision course. This is of two weeks duration (three times a year) and is aimed at officers taking up appointments in secondary and tertiary depots.

c. Equipment Management Course. The Equipment Management course is designed for Equipment Managers filling staff appointments in the Directorate of Supply Management. The course is of two weeks duration and three courses are run each year. As well as ensuring the student is familiar with the organization and responsibility of staffs, branches and agencies involved with Equipment Management the following are the main objectives:

- (1) To be able to calculate the asset/liability match.
- (2) Understand the involvement of the Royal Electrical Mechanical Engineers (REME).
- (3) Understand critical path and network analysis techniques.
- (4) To understand the responsibilities for Issues, War Reserves, Sales and Disposals.
- (5) To be able to prepare accurate and concise briefs.
- (6) Understand budgets and financial control procedures.

d. Ordnance Officers' Course. The Ordnance Officers' (OOs) course lasts for 10 weeks and is attended by all RAOC officers commissioned from RMAS. The aim of the course is "to prepare officers for non-specialist appointments at Grade 2/3 level in Army Ordnance Services by broadening their understanding of logistics and of RAOC functions and responsibilities". The course is divided into the following modules: Field Logistics, Organisations and Logistic Concepts; Unit Q Accounting; Ammunition; POL; Rations; Depot Operations; Provision; Vehicles; ADP; and Logistic and Operational Staff Work. In the technical management training context the two principal modules are Depot Operations and Provision. The ADP module is the standard basic microcomputer course taught at the School of Ordnance and is of three days duration. Computers are, however, used at other stages of the course so students have a sound working knowledge by the end of the course. The Depot Operations module consists of 62 periods of instruction and topics such as storage methods, planning a storehouse, commercial physical distribution, materials handling and automated warehousing are covered. There are a number of practical exercises and several visits to storage installations. The Provision module has 40 periods allocated to it and an overview of both primary and manual (secondary/tertiary) provision is provided. Topics such as codification, parts change, Standard Priority System, forecasting and War Reserves are taught.

The need to ensure that officers receive the necessary training before assuming appointments which involve the management of equipment or stores is now becoming more widely acknowledged. The growing awareness of the Army's enormous financial investment, in terms of both materiel and manpower, and the penalties for failing

to manage these resources in an efficient and effective manner, has undoubtedly contributed to this resurgence of interest in technical management subjects. Further consideration may, however, need to be given to the balance of the current provision of training in this field. The Officers Primary Provision course does not appear to be reaching the officers for which it was originally intended. Very few military officers attend the course - and many of the civilian students are only clerical officers. The length of the course may be a deterrent. Perhaps the requirement is for a practical course of, say, three weeks at the operator level and a shorter course of ten days for desk officers, who are more likely to be concerned with policy matters. Another apparent shortfall in the training currently available is at the formation ordnance representative level; the Grade 2 and 3 officers on the staff at District or Divisional level. Some elements of the Equipment Management course are relevant but that course is really aimed at Equipment Managers in the Directorate of Supply Management Divisions. A formation ordnance representatives course for Warrant Officers is run by the Management Wing of the School of Ordnance. A similar course for officers could be beneficial. Above all, there is a need to make certain courses mandatory for officers assuming specified appointments. In the longer run, this could have considerable benefit for the standards of technical management in the Corps.

4.5 EXTERNAL MANAGEMENT TRAINING

External management training, mainly in general management subjects, is available to RAOC officers in a number of military and civilian institutions. The overwhelming majority of officers selected for training externally are at the senior Captain/junior Major level. That is to say, at the stage in their career which has previously been identified as most appropriate for the main input of management training. The Army Staff Course and postgraduate management courses at UMIST or CIT are the principal institutions to which the Corps sends its officers. The exception to this are those young officers who are selected to read for in-Service degrees.

Undergraduate Courses. The Corps currently has a total of 15 officers studying for first degrees in a variety of subjects. These are three-year courses and officers are at various stages of completion. The majority are at RMCS reading applied science, computer science or engineering oriented degrees. One officer is reading for a BSc in Management Science at UMIST. A small number of officers, including at least one Brigadier, are also studying with the Open University, but there is no information available on the actual numbers involved.

In general, the Corps is willing to support suitably qualified young officers who want to take in-Service degree courses, but no particular efforts are made to maximise the opportunities which exist for the Corps to increase the number of graduates. Serving officers are not, for example, strongly encouraged to obtain the requisite 'A' level GCE passes to achieve the necessary entry standards. There is no firm policy for directing those who do intend studying for an in-Service degree to read specific subjects. DGOS Training Instruction No 2 was recently revised to read "Officers should be encouraged to opt for degree courses that are appropriate to RAOC such as Applied Science; Command and Control, Communications and Information Systems (CIS); and Information Technology (IT)". There are, of course, a number of other degrees which would be equally useful to the Corps, including management science, economics and business studies. Nor does the Corps have a firm policy for posting graduates to appointments where they will need their specialist qualifications. In many respects this is perfectly acceptable as the subjects actually read are probably less important than the rather intangible advantages of a university education. As the ROCS report (1) stresses, "It would be wrong to be unduly restrictive in the undergraduate field where it is overall quality and intellectual development which we seek". The benefit to both the Corps and the individual will be seen in the long run - the immediate, or short-run, advantages are less obvious. At present it is difficult to escape the conclusion that the Corps would prefer to have all of its subaltern posts in unit establishments filled rather than sending officers to university.

Junior Command and Staff Course (JCSC). As a result of the ROTE (2) study recommendations, the Junior Officers Training and Education Scheme (JOTES) now requires all regular officers to attend JCSC before they can be promoted Major. Although that course does not include 'management training' in its syllabus, many of the subjects taught include a substantial amount of training in both personal and interpersonal skills, which could quite properly be described as management development. This training takes place in a purely military setting and an Army-wide context. Nevertheless, it is an important element of an RAOC officer's career development and much of the training will be relevant throughout his career.

Staff College. About a third of all regular officers attend the ASC. The aim of the ASC at Staff College is, "to develop the professional knowledge and understanding of selected officers in order to prepare them for the assumption of increasing responsibility both on the staff and in command". The additional aim of Part 1 at RMCS is, "to develop in accordance with individual

qualifications and experience, the potential commander's and staff officer's understanding of science and technology and its application to the problems of defence". Part 2 of the ASC at Camberley lasts 46 weeks whilst Part 1 is divided into three Divisions lasting respectively 39 weeks (Division I - for those with appropriate university degrees), 45 weeks (Division II - for those with appropriate GCE 'A' and 'O' level subjects) or 8 weeks (Division III - the remainder). During Part 1 of the ASC there is a small element of management training but this differs between the three Divisions. The topics studied by Division I and II students include human and environmental studies, statistics, financial management, procurement and management techniques. A total of 192 periods are devoted to these topics. Management training in Division III is of much shorter duration and covers computers, network analysis, procurement finance, statistics and Management Services.

Officers attending Divisions I and II of the ASC receive a satisfactory, if rather limited, grounding in some general management concepts and techniques. These are, however, set in the context of the Army as a whole and are not aimed specifically at RAOC situations. The amount of management training received by officers attending Division III - the majority - is of even less value. However, officers who have attended the ASC are more likely than other officers to fill the senior appointments in the Corps, when there is an overriding need for the highest levels of management expertise. Corporate planning and budgetary control are but two examples of the areas in which this expertise is essential. At present the methods for ensuring that these officers receive the management training they need to equip them for senior appointments in RAOC are less than satisfactory. This is widely acknowledged by many senior officers and the problem must be addressed as a matter of urgency.

Postgraduate Management Training. Each year the Corps selects six officers to receive formal degree or diploma management training at UMIST, CIT or, beginning in 1987, at RMCS. The number of officers selected for this training has fallen from ten to six in recent years. Officers placed in the field for selection by the Officers' Careers Committee must sit the Graduate Management Admission Test (GMAT). Final selections are made on the basis of their performance in the GMAT but tempered by career performances to date and likely future potential. The GMAT scores are also used to decide whether officers should read for an MSc or a diploma. The courses at UMIST, CIT and RMCS have different objectives and course content and will be described separately:

University of Manchester Institute of Science and Technology (UMIST). The Corps' currently stated aim for the UMIST course is, "To keep RAOC officers abreast of the latest developments in industrial and commercial administration and management techniques, particularly those which apply to the RAOC, and to enliven their critical faculties and broaden their education". In recent years three or four officers have been selected each year to attend UMIST. Until 1976/77 ten officers were selected each year and numbers have gradually declined in successive years. 1979/80 was a watershed year in so far as the university restructured its postgraduate courses and two-year MSc courses were reduced to one-year courses. Suitably qualified RAOC officers were allowed to study for an MSc degree. Those officers without the necessary qualifications or aptitude continue to study for a UMIST diploma. Prior to 1979/80 all RAOC officers studied for a diploma which consisted of five core subjects (Marketing, Production, Behavioural Science, Quantitative Techniques, and Finance and Control), one of which was selected as a specialist subject for in-depth study in the second term. MSc students now spend an additional 14 weeks at UMIST and must submit a more comprehensive dissertation or thesis than diploma students. The current UMIST course may be structured around one of three core themes: Management Sciences, Organizational Psychology or Marketing. RAOC officers are strongly encouraged to read Management Sciences, where they must, in turn, choose to specialise in one of five areas. The specialist areas are: Business Finance, Business Economics, International Business, Industrial Relations and Personnel Management, and Operations Management. As far as possible, RAOC officers are expected to select either Industrial Relations and Personnel Management or Operations Management. Depending on the specialist theme selected, students must then choose to take a number of compulsory and optional study units from a complete 'basket' of 16 study units. An individual has a considerable degree of flexibility when making a selection but ultimately ends up studying a fairly narrow range of subjects.

Cranfield Institute of Technology (CIT). The CIT course is relatively new, both in the commercial world and for RAOC officers. The ever increasing cost and importance of the distribution function and its effects on individual organisations, and the economy in general, led to a demand for more formalised training in the subject. A MSc degree in Distribution Technology and Management was launched by CIT in 1980. The course is run by the Distribution Studies Unit, which is part of the National Materials Handling Centre. The first RAOC students attended in the 1983/84 academic year and one or two officers are normally selected each year. The Corps' stated aim for the course is "To educate and train selected RAOC officers in the technical skills for system design and management within distribution and to broaden

knowledge of related functions for a wider career in distribution and supply". Unlike UMIST, CIT is a structured course with little scope for individual specialisation outside the core themes. The course content is still evolving, but the five main themes which are the basic building blocks of the course are as follows:

- a. Economic Overview.
- b. Distribution system analysis and design.
- c. Technological choice in distribution.
- d. Distribution systems engineering.
- e. Distribution systems management.

Royal Military College of Science (RMCS). RMCS, which is run on a contract basis by CIT introduced a Master of Defence Administration (MDA) degree in 1987. One RAOC officer attended the first course and a second officer attended the 1988 course. The MDA course is aimed at both military and civilian students who are involved in the defence industry. The MDA degree course is deliberately modelled on more traditional MBA courses, but with a very heavy emphasis on the defence industry. The course, which lasts for one year, is in three parts. Part 1 deals with basic concepts, such as the context of defence, and management concepts and techniques. Part 2 gives students an opportunity to select one of three themes and a number of additional modules. The three themes are Defence Contracting, Sales and Marketing; Management of Innovation; and Resource Management. The latter theme was developed in consultation with RAOC and it is expected that RAOC students will select this option. Part 3 of the course is a project and leads to the submission of a dissertation.

As has previously been noted, comparatively little detailed research has been carried out on the relevance and value of attending a postgraduate management course. Much of the research which has been published has concentrated on employability, salaries and the like, and course content has rarely been examined other than in subjective terms. Little differentiation has been made between the various courses on offer and the particular features which might make them more, or less, attractive to organisations or individuals. The reputation of a particular institution can often be more significant than its actual product. Certainly little effort has been made to evaluate the benefits which RAOC has derived from its long association

with higher management education. The main purpose of this study was, of course, to examine this situation in greater detail and the majority of the remainder of this thesis is devoted to that task.

Senior Officer Training. There is very little formal management training for Lt Cols and above. A few officers are selected to attend the Senior Course at Henley, the Management College. This is a four week, fairly intensive, course which gives an overview of a number of management themes, including; Problem Solving With People, Information and Management, the Changing Environment, and Strategy and Planning. Some time is also devoted to elective studies in subjects like basic accounting, time management and microcomputing. A few officers are also selected to attend either the 'Flag' or 'Standard' course at the US Defense Resources Management Education Center in Monterey. These courses are of approximately one month's duration. The main benefits to be derived from these courses, apart from the opportunity to refresh specific knowledge or skills are those of shared experiences with people of similar status from other walks of life. Some officers are selected to attend the Senior Officers Logistic Course (SOLC) which is, to some extent, management related, and a very small number are occasionally selected for the Joint Service Defence College (JSDC) course and the Royal College of Defence Studies (RCDS) course. Seminars, conferences and study periods, however, provide the main opportunities for senior officers to acquire additional management training, and these tend to be fairly infrequent.

It is current policy that the majority of management training is undertaken at Captain/Major rank. Senior officer training has, therefore, been largely neglected. The ROTE report drew attention to this in respect of both logistic management and financial/manpower management. The need for this and other management training at senior officer level is self-evident and some initiatives are already in hand at Army level to increase the availability of suitable courses.

REFERENCES

- (1) Review of the Officer Career Structure (ROCS), Final Report, Oct 1986.
- (2) Review of Officer Training and Education (ROTE), Final Report, Dec 1985.

CHAPTER 5

TRAINING NEEDS

5.1 INTRODUCTION

A systematic approach to the implementation of a sound training scheme requires careful analysis of the training needs of the organisation and the individuals within it. In this study, which looks at both training and education needs, a number of research activities were needed to ensure that the views of a wide cross-section of officers were represented in the findings. The considered views of the more experienced officers in the Corps, who are the policy and decision makers, are obviously important and a survey was used to obtain their views on current and future training needs. This information was then used to construct a Training Needs Profile, which indicates in very general terms the competencies required by officers at various stages of their careers.

There has been a great deal of interest in management competencies in recent years and the findings of the senior officer survey were compared with some of the leading studies which have been carried out elsewhere. Although many of the competencies can best be developed by training and on-the-job activities, some require more comprehensive study and some involvement with educational processes. The second part of this chapter relates some of the desirable competencies to the subjects which are to be found in management or business studies courses. Finally, as a cross check on the relevance of these subjects to the needs of the RAOC officers, an analysis of the job descriptions and job specifications of 287 officers was carried out to match job content to likely education needs.

5.2 MANAGEMENT TRAINING SURVEY

Methodology. Because of the constraints of time, availability and finance a protracted series of individual interviews was not possible. As an alternative, an RAOC Management Training Seminar was held at the School of Ordnance with attendance confined to senior officers (ie. Lieutenant Colonels and above). The seminar, which was introduced by DGOS, provided a forum for a comprehensive discussion of all aspects of management training. The day's programme included a review of the management education and training currently provided to RAOC officers and drew comparisons with current practice in other military and civilian organisations. Some of the new developments in management education and training were described and demonstrated by visiting speakers.

Approximately 60 officers attended the Seminar. At the end of the Seminar they were given a questionnaire to be completed on their return to their units. The completed questionnaires were required to

be returned to the School of Ordnance by a stipulated date. It was subsequently decided to distribute Conference Notes and questionnaires to those Lieutenant Colonels and above who had been unable to attend the Seminar, thus expanding the survey and ensuring a more representative sample of opinion would be reflected in the study.

The survey had a number of objectives. The main aim was to assess the management development needs of RAOC officers at various stages in their careers. Information was also sought on senior officer training needs in relation to appointments currently held and respondents were asked for their opinions about management development methods. In order to achieve these objectives three separate questionnaires were used and their construction is discussed below. The questionnaires were not intended to produce detailed information capable of complex statistical manipulation because management training does not readily lend itself to that type of rigorous analysis. The requirement was for aggregated information which would indicate general trends or broadly based consensus about the management training which should be available to the majority of officers. To this end, all respondents were asked to add any comments which they might have about management training and a large proportion of officers availed themselves of this opportunity. Some of the comments are summarized later in the chapter. As the survey was completed anonymously none of the comments are attributable!

The three questionnaires were based on the work of Jones and Woodcock (1). Two of the questionnaires were adapted from instruments designed by them, but modified to make them more relevant to the RAOC context. The other questionnaire was designed to reflect the model of General Managerial Competency, which was also devised by Jones and Woodcock and illustrated in Chapter 3. Closed questions were used throughout the questionnaires and respondents were asked to tick appropriate boxes on the forms or select from a rating-scale. Spaces were deliberately left for respondents to add topics not already included in the questionnaires, but very few chose to do this. The three questionnaires have been included as Annexes as follows:

- a. Annex A - Questionnaire 1 - Management Development Audit
- b. Annex B - Questionnaire 2 - Senior Officer Self-Assessment Check List
- c. Annex C - Questionnaire 3 - Management Development Methods Survey

Questionnaires are not always the best way of sampling opinion. Response rates are often very poor and there may be an element of

bias. Questions need to be carefully structured and the questioner cannot be sure that the questions are interpreted as he intended. The use of jargon is difficult to avoid, particularly as management training has more than its fair share of this. These shortcomings are fully acknowledged and this is another reason why the findings of this particular survey have only been used in a generalised way. Notwithstanding the widely recognised limitations of data gathering by questionnaires, the method does permit a wider coverage than other methods and is probably less inconvenient to the respondent. Data analysis is certainly less complicated than that needed for information gathered, for example, from interviews using open-ended questions.

The questionnaires used in this survey were piloted by means of a small number of guided interviews which sought to obtain opinions about the layout, wording or other possible ambiguities in the questionnaires. Minor changes were made as a result of these interviews.

The questionnaires were distributed to approximately 55 officers at the RAOC Management Training Seminar on 9 September 1986. A further 85 questionnaires were sent out by post at the end of October, with a cut-off date for return of 17 November 1986. The majority of Lieutenant Colonels and above in the Corps should have received a copy of the questionnaires, although it was not always possible to be certain that they were sent to the correct (ie current) unit address. A little over 90 questionnaires were returned. Of these it was possible to use exactly 90 for analysis, after those which were incomplete or were returned late had been eliminated. The response rate was, therefore, approximately 65%.

Results. The detailed analysis of the information gathered in the survey is given below. As each of the questionnaires was designed for a different purpose they are dealt with separately in the first instance.

Questionnaire 1 - Management Development Audit. Questionnaire 1 was designed to assess the management development needs of RAOC officers at various stages in their careers. The majority of the questions dealt with general management skills, but a few technical skills were also included. The stages of an officer's career were defined as Junior (Subaltern), Middle (Captain/Major) and Senior (Lieutenant Colonel and above). This division was widely accepted although one or two respondents would have preferred a distinction to be made between Captains and Majors. Respondents were asked to use a four point rating scale to indicate the management training needs of each category of officer in 37 different areas.

Training Needs Profile. The mean rating of all respondents was calculated for each of the 37 questions. These were then plotted on graph paper to show the differing requirements at Junior, Middle and Senior levels. The results are shown in Figure 5.1. This Training Needs Profile shows very clearly the relative importance of each of the subject areas at each level and allows a comparison to be made. It is readily apparent that training needs are considered to be different at each level, which is hardly surprising given the widely differing appointments which are likely to be held.

Junior Officers. The emphasis at this level is on the need for training in personal and interpersonal skills. Table 5.1 lists the most highly rated training needs for junior officers. Subject areas which were not considered relevant for junior officers included coping with stress, managing interdepartmental projects, negotiating, setting and controlling budgets and supervising contracts.

Table 5.1 TRAINING NEEDS - JUNIOR OFFICERS

<u>Ranking</u>	<u>Subject</u>	<u>Rating</u>
1	Written communications	3.5
2	How to make oral presentations of information, both formal and informal	3.4
3	The use of microcomputers and information technology	3.1
4 =	The development of teamwork within the work group	3.0
4 =	Counselling subordinates on their personal problems	3.0
4 =	Public speaking skills	3.0
7	Listening skills	2.9
8 =	Setting goals and objectives, both individually and in groups	2.7
8 =	Conducting interviews	2.7
8 =	Problem solving and decision making techniques	2.7

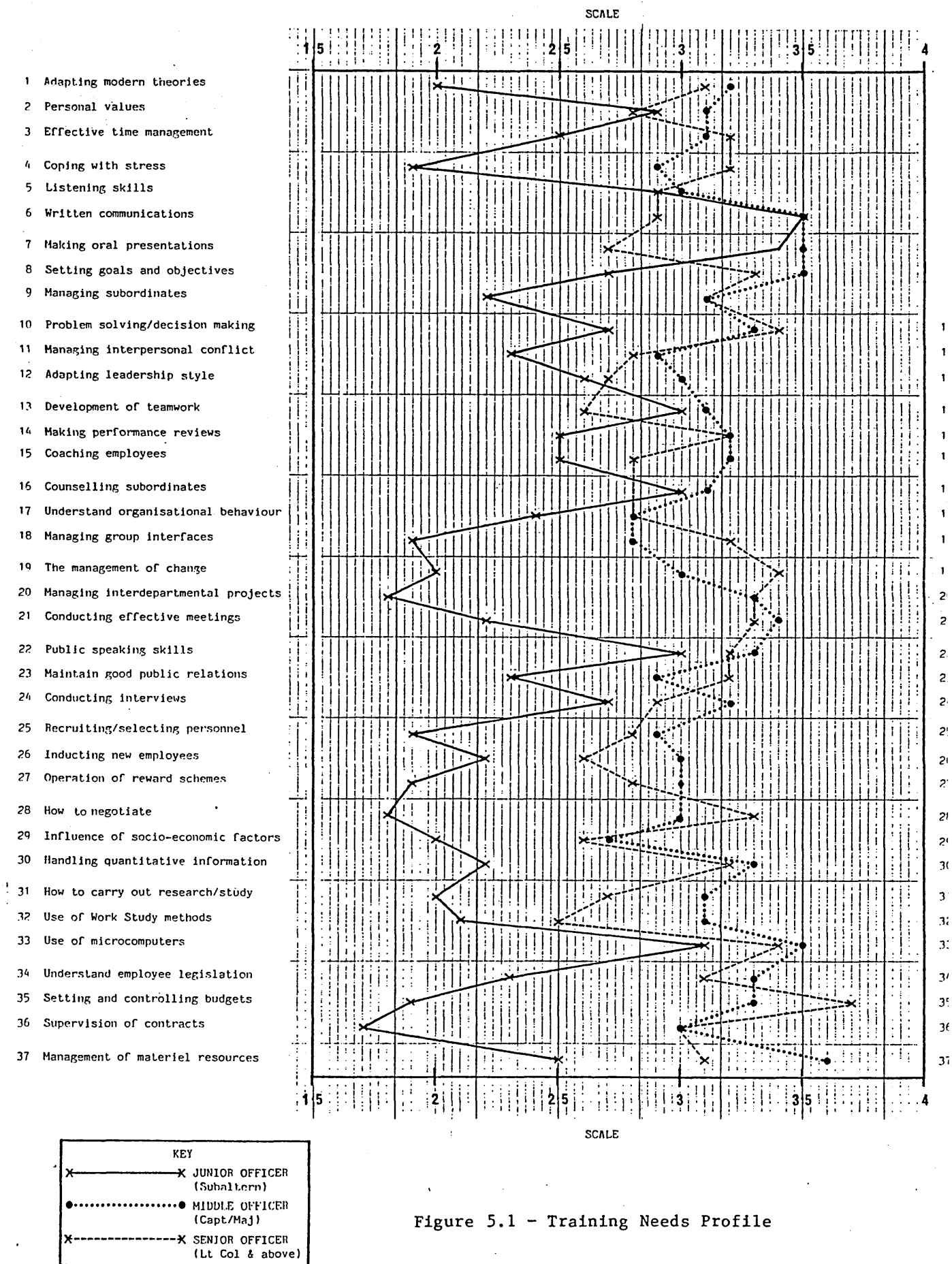


Figure 5.1 - Training Needs Profile

Middle Officers. The main training needs of Captains and Majors are shown in Table 5.2. There are several important points to note about these findings. It is quite clear that this is considered to be the stage at which the bulk of the training should be concentrated, in both technical and general management subjects. The skills to be acquired span a very wide range and very few topics are considered to be unimportant.

Table 5.2 TRAINING NEEDS - MIDDLE OFFICERS

<u>Ranking</u>	<u>Subject</u>	<u>Rating</u>
1	The management of material resources	3.6
2 =	Written communications	3.5
2 =	How to make oral presentations of information, both formal and informal	3.5
2 =	Setting goals and objectives, both individually and in groups	3.5
2 =	The use of microcomputers and information technology	3.5
6	Conducting effective meetings	3.4
7 =	Problem solving and decision making techniques	3.3
7 =	The management of interdepartmental projects	3.3
7 =	Public speaking skills	3.3
7 =	Handling quantitative information	3.3
7 =	An understanding of current legislation for employee relations, Health & Safety at Work etc	3.3
7 =	Setting and controlling budgets	3.3

Senior Officers. The training needs profile of senior officers shows larger fluctuations than that of the middle officers but it is apparent that there are still a substantial number of subjects which may need to be included in a management training programme. These tend to fall into one of two categories. Some of the topics reflect the changing nature of the roles and responsibilities of senior officers. The management of change and the setting of goals or objectives fall into this category. The other category reflects the changing nature of military life in general and the heightened awareness of financial management and new technology, particularly information technology. The most strongly rated training needs are shown in Table 5.3. The subjects listed were closely followed by time management, stress management, performance reviews for subordinates, managing group interfaces, public speaking skills, the maintenance of good public relations and handling quantitative information. Topics which were considered least relevant included

the development of teamwork within a group, inducting new employees, the influence of socio-economic factors and Work Study methods.

Table 5.3 TRAINING NEEDS - SENIOR OFFICERS

<u>Ranking</u>	<u>Subject</u>	<u>Rating</u>
1	Setting and controlling budgets	3.7
2 =	Problem solving and decision making techniques	3.4
2 =	The management of change	3.4
2 =	The use of microcomputers and information technology	3.4
5 =	Setting goals and objectives both individually and in groups	3.3
5 =	The management of interdepartmental projects	3.3
5 =	Conducting effective meetings	3.3
5 =	How to negotiate	3.3

Questionnaire 2 - Senior Officer Self-Assessment Check List. The second questionnaire asked officers to focus on their current appointments and identify the knowledge and skills which are required in those posts. They were then asked to indicate any subject areas which are features of those posts but for which they would like additional training. The total honesty of some respondents was most commendable - if a little worrying! There is clearly a requirement for more training at senior officer level. Questionnaire 2 was based on the model of General Management Competency, but a number of technical or specialist subjects were added. A full summary of the results of this questionnaire is shown at Annex D.

Feature of Current Appointment. Those subjects which were most frequently listed as "feature of current appointment" are shown in Table 5.4. There are no surprises in this list. It should also be noted that with just two exceptions (managing change and performance reviews) officers are reasonably comfortable with the subjects which feature most prominently in most appointments.

Table 5.4 MOST PROMINENT FEATURES OF CURRENT APPOINTMENT

<u>Serial</u>	<u>Subject</u>	<u>Feature of Current Appointment</u>	<u>I Need to Learn More</u>
		%	%
1	Communication	84	12
2	Decision making	82	6
3	Chairing or participating in meetings	82	10
4	Problem solving	81	11
5	Setting objectives	80	14
6	Delegation	78	12
7	Performance review	77	26
8	Managing change	74	39
9	Team development	74	14
10	Motivation	72	14

The subjects in which senior officers felt they had the greatest training needs in their current appointments are listed in Table 5.5. With minor exceptions these subjects are also fairly strongly featured in many appointments.

Table 5.5 TRAINING NEEDS IN CURRENT APPOINTMENTS

<u>Serial</u>	<u>Subject</u>	<u>I Need to Learn More</u>	<u>Feature of Current Appointment</u>
		%	%
1	Information Technology	57	67
2	Microcomputing	50	67
3	Budgetary Control	46	59
4	Handling Statistical Information	39	63
5	Cost/Management Accountancy	39	37
6	Managing Change	39	59
7	Strategic/Corporate Planning	37	74
8	Stress Management	34	49
9	Conflict Management	29	58
10	Time Management	28	60
11	Contracts	28	40

Questionnaire 3 - Management Development Methods Survey. This survey was intended to gauge respondents views about the management development methods which are currently used in the Corps or which might be introduced in the future. In order to assist respondents each of the methods was described briefly and some of the main advantages and disadvantages were listed. Although this could be construed as 'leading' responses it was considered preferable to leaving officers in doubt about what each method entails. Officers were asked to use a 5 point rating scale as follows:

- 5 - A strong feature of our training
- 4 - A moderately successful feature
- 3 - An area needing improvement
- 2 - An option not available but which should be
- 1 - Not applicable to RAOC

A summary of the results of this questionnaire is shown in Table 5.6.

Although the results are not conclusive they are interesting and provide some useful information. Some methods are obviously working satisfactorily. These include the activities of the Training Centre, external courses, coaching and job rotation. Areas which may need improving include in-house training, performance reviews, project groups and seminars/conferences. Many respondents considered that open and distance learning should be more widely available and that more opportunity for secondments was desirable. The large majority of officers thought that mentoring and group training, of the behavioural type, were not applicable to RAOC.

Significant Findings. The survey did not produce any real surprises. Clear differences emerged in respect of training needs at Junior, Middle and Senior levels. Junior officers management training needs were confined to specific personal and interpersonal skills with communication skills being regarded as particularly important. The Captain/Major level was seen as being the one where the main training effort should be concentrated in respect of both general and specialist management training. The importance of specialist or technical training was noticeable from some of the comments from respondents who considered that more emphasis should be placed on training for role. Where additional management subject headings were added to questionnaires they were normally in areas such as commodity management, repair systems or equipment management. At the senior officer level a wide variety of training requirements were identified but these tended to reflect the needs of specific appointments. A general training course might not meet the needs of senior officers. Questionnaire 2, in particular, showed that as

Table 5.6 MANAGEMENT DEVELOPMENT METHODS

Development Method	Scale				
	5	4	3	2	1
	%	%	%	%	%
In-House Training	22	33	40	5	0
External Training	31	50	19	0	0
Training Centre	59	23	18	0	0
Performance Review	16	39	43	1	1
Job Rotation	22	46	28	2	2
Secondments	2	21	40	31	6
Using Consultants	0	33	34	16	17
Mentoring	6	23	33	7	31
Counselling	7	37	26	10	20
Coaching	23	40	30	2	5
Project Groups/Task Force	6	32	43	11	8
Seminars/Conferences	9	41	40	7	3
Group Training Programme	6	11	31	13	39
Open/Distance Learning	2	7	41	38	12

many as a third of all senior officers have a significant number of training needs, but that these cover a wide spectrum of subject areas. Common features tended to fall into the two categories of new technology or those that stem from new responsibilities, such as financial management and the management of change. As one would expect many of the responses to Questionnaire 2 correlate with those of Questionnaire 1. In both cases financial management (budgets and cost/management accountancy), information technology (and micro-computing), handling quantitative information and the management of change are identified as areas which need the greatest training effort. The correlation also applies to subject areas which are considered less critical. The Management Development Methods questionnaire yielded some useful information. There is general satisfaction with much of what is currently available. There are several areas where an improvement would be welcomed and many officers considered that open and distance learning and secondments should be more widely available.

Comparison With Other Research Findings. The findings of this survey are similar to those of several other recent studies. Peel (2), for example, in his study on behalf of the British Institute of

Management, found that the areas in which companies intended to concentrate management training in the immediate future were finance (for non-financial managers), microcomputing/computer appreciation and communication skills. He also found that the majority of training was likely to be on-the-job training, internal courses or, to a slightly lesser extent, external courses. This is very similar to the findings of the University of Bath study (3) referred to in an earlier chapter. The latter study, however, found that on-the-job training was favoured less for general management training. The University of Bath study found that whilst companies carrying out management training regarded general managerial skills to be the most important area of training, many were also devoting as many resources to functional management areas such as sales and marketing, production management and data processing.

A Harbridge House survey (4) is of interest in that it found that there was little agreement about the aims and objectives of management training programmes. Comparatively few companies operate a continuous and progressive development programme for their managers. Most training appears to be done on an opportunity basis or for remedial purposes. That survey found a fairly even split between in-house and external provision of training courses, with large, centralised organisations tending to rely on internal courses. The survey also found a trend towards courses which integrate technical and general management needs. In a separate survey (5), Harbridge House found that "distance" education is evolving rapidly in an increasing number of large UK businesses. The flexibility of this type of training for both the organisation and the individual was cited as perhaps the main reason for this expansion.

Comments. A number of officers took the opportunity to add comments on degree and/or management training at the end of the questionnaires. The most frequently recurring themes are highlighted in the following paragraphs. They tend to fall into one of three categories; policy, content or methods. The majority of comments were constructive and very much in favour of the continued or expanded provision of management training.

Policy

a. Degree Training. A large number of officers were keen to see an expansion of both graduate and post graduate training, especially in management training subjects:

"We should aim to ensure that as many officers as possible obtain either a 1st or 2nd degree in relevant subjects".

"Formal full time training at degree, or above, level is, I believe, the ideal starting platform. Post graduate study (full time) is essential for selected officers, those who are to find a career in specialised areas".

"UMIST I am a strong supporter of this or a similar course for a selected number of our officers each year".

".... UMIST should be preserved and if possible officers sent to it increased in numbers".

"I feel strongly that we must not sacrifice good education that broadens the mind on management science subjects in an effort to ensure all is relevant to RAOC work I think it is important that we go to non-service establishments to obtain our training so that we can learn of tomorrow's solutions rather than limit ourselves to yesterday's problems".

b. Qualifications. Some officers were sceptical about the value of qualifications:

"There still remains very little evidence that gaining managerial qualifications will enhance your career, so why make the effort except perhaps to improve your employability in a second career?"

An alternative view on qualifications was presented by one officer:

"I therefore think that some form of senior officer qualification should be set up, preferably recognised by the outside world, which should be obtained through distance study and examination".

c. Senior Officers' Training. A number of officers feel very strongly that insufficient attention is paid to senior officer training:

"Officer training in management concentrates on the first half of a 35 year career. We must ensure that older, more senior officers are 'topped-up' and are aware of developments. Older officers can be 20 years out of date".

"I believe that there is a shortcoming in that there is little relevant formal training in RAOC officer management training beyond the middle-piece major level".

"We are very bad at educating our more senior officers in operating the totality of efficient, cost orientated, modern systems".

- d. Staff Trained Officers (ie. those who have attended the Army Staff Course). These officers were singled out by some respondents as being in special need of management training:

"We are atrocious at educating 'psc' officers in management skills. This is an Army wide deficiency in which we as a Corps could take a lead. Being 'psc' does not in itself confer any skill in programme management yet it is the normal qualification for higher management". (The officer went on to add: "Not sour grapes - I is 'psc' educated").

"I believe as a Corps we are caught by the dilemma of our high-flyers, who eventually hold the one-star appointments, rarely being exposed to the 'bread and butter' activities of the RAOC".

".... consideration be given to either extending the training given at RMCS to provide the modules required or reviewing the Army Staff Course element at Shrivenham to include management training aspects now considered essential for staff officers".

Staff trained officers were not without their supporters:

"Perhaps the reason why more Corps senior officers have Staff College backgrounds than UMIST is that the training equips them better".

- e. Posting Policy. A number of officers were keen to relate management training needs to posting policy:

"Training should be directed closely to the individual and his next appointment".

"It is believed more could be done to identify individual training needs in connection with projected employment. These requirements could well be judged from personal profiles against meaningful up to date and comprehensive job specifications".

".... much depends on the future employment of the officer. I believe, therefore, that there is a need to gear training at senior officer level to specific types of appointment".

g. Training Time. Perhaps the most recurring theme in the many comments was the shortage of time available for training and the related problem of manpower shortages:

"If only we had the time to be trained!"

"I do not believe that there is a great deal wrong with the way we train our officers other than the ability of the 'system' to provide the necessary time".

"We need more training almost everywhere but we haven't got enough staff to let people off to do the training. Hence we cannot get away from crisis management. The age old problem of balancing training/work gets more difficult".

"When we are all fighting to keep our heads above water, time spent on training is at a premium. It has to have a pay-off".

Content. Many officers identified subject areas in which they considered more training was essential. These included information technology, logistics procedures, stress management and microcomputing. But the overwhelming majority of comments focused on financial management in one shape or form. A selection of these comments follows:

"We must address the lack of financial management training for senior officers".

"All should have an appreciation of management accounting, budgeting can no longer be left for the experts to deal with in isolation".

".... as life/work becomes more financially based we are vulnerable to in depth questions by trained professional experts".

"If I were to single out a single area of importance in which, I believe, we are seriously lacking, it is to highlight the absence of proper financial management skills at any level within the depot".

"I believe there are far too many depot officers who do not know the basics of budgeting, management accounting, the incentive scheme etc".

Methods. Apart from the strong support for university based training, respondents had some interesting views on other training

methods including the use of other training organisations and distance learning. On a related theme, many officers had some comments about the need for more information about management training:

a. Other Agencies. Some officers recommended courses with which they were familiar:

"I recommend you contact Templeton College, Oxford and examine their short course 'Improving Managerial Effectiveness'".

"Most universities and polytechnics run useful part-time/ evening courses. Enrolment in these should be encouraged ...".

".... I do believe in the value of outside courses - but short ones either in specific subjects or more generally" (The writer then goes on to mention the Nat West Management Training Course).

b. Seminars/Short Courses. Several officers considered that short courses or seminars were most appropriate for management training:

".... All these subjects and several others in management theory can be met by increasing the short sharp shock treatment of week long courses and seminars".

c. Distance Learning. This attracted a considerable degree of support from several respondents:

"I think more use could be made of distance learning and Management Wing, School of Ordnance reduced as a result".

"Distance learning as per Henley could be a great success if properly programmed into officers daily routines".

"I think this is fine provided the 'carrot' is big enough; there should be no 'stick'".

d. Information. Comments in this context ranged from cribs about the lack of information to constructive suggestions for improving the availability of information on managerial topics:

"In many areas we are managing in a vacuum. We lack good information and targets".

"Management is applied common sense. Where we are at fault is in our failure to provide management information at the right place and in the right format".

"A review of methods to publicise available courses is suggested. Passage of information tends to be sporadic".

"Senior officers, most of whom find attendance on courses difficult, would appreciate receiving a regular package on a particular aspect of management training".

"As you get more senior, it is difficult to attend courses but you do spend a lot of time in a car when it would be possible to read An occasional newsletter or precis on some aspect of management as part of a distance learning package would be both effective and welcomed".

5.3 MEASURES OF PERFORMANCE

In the past the arguments in support of management education and training programmes have been mainly subjective. Comparatively little research has been devoted to the evaluation of course content. Some organisations are now attempting a more objective approach which seeks to establish the skills and knowledge required for the performance of specific appointments. This information can then be used to determine developmental needs and can help in the selection of appropriate training. The information can also be used in the preparation of course curricula. One of the main charges levelled at business school courses is that they emphasise the acquisition of cognitive knowledge without adequately developing the skills to transfer and apply this knowledge. Management education needs to become more relevant to the workplace without entirely sacrificing the academic or theoretical concepts which underpin on-the-job performance. There is now a growing awareness that a balanced curriculum, which emphasises both cognitive learning and skill development, must become the norm, rather than the exception, in business schools. Competence must be measured more by the quality of the performance of the individual (output) and less by the quality or quantity of training or education (input) he receives. Identifying and measuring the competencies required for superior management performance is a daunting task. A number of approaches to the task have been made in recent years or are currently in hand.

The American Management Association (AMA) model of competency has been described by Boyatzis (6), Powers (7), and others, and is a useful starting point. Empirical research identified 18 generic management competencies (See Table 5.7) which cluster into four groups:

- a. Goal and Action Management. This cluster deals with the managers initiative, image, problem-solving skills, and goal orientation.
- b. Directing Subordinates. This cluster involves a managers freedom of expression both in terms of giving directives and orders and in giving feedback to help develop subordinates.
- c. Human Resource Management. Managers with these competencies have positive expectations about others; have realistic view of themselves; build networks or coalitions with others to accomplish tasks; and stimulate co-operation and pride in work groups.
- d. Leadership. This cluster represents a manager's ability to discern the key issues, patterns or objectives in an organisation, and to then conduct himself and communicate in a strong fashion.

A weakness of this research is that it did not identify the knowledge which is generic for superior managers. It did, however, determine that knowledge is a threshold competency for effective managers. This body of knowledge could be included as a fifth cluster. The AMA competency programme has been incorporated into a number of courses, including MBA courses, with considerable success (8).

In the UK, the Training Agency has already embarked on a project to define the main areas of competence which are implied by the term "management", the competencies associated with different levels of management and to identify appropriate assessment or certificating procedures for accreditation. The results will, in due course, be made available to the Council for Management Education and Development (CMED). Table 5.8 shows the outline classification of competencies proposed by the Training Agency working party. A more detailed explanation of the classification is at Annex E. Unlike the AMA research there is an acknowledgement of the need for cognitive knowledge and functional expertise.

TABLE 5.7 AMA CLUSTERS OF MANAGEMENT COMPETENCIES

Cluster 1. Goal and Action	Cluster 3. Human Resource Management
<u>Efficiency orientation.</u> A concern with doing something better.	<u>Accurate self-assessment.</u> Realistic and grounded view of self.
<u>Proactivity</u> Disposition towards taking action to accomplish something.	<u>Self control.</u> Ability to inhibit personal needs and desires in service of organisational goals.
<u>Concern with impact.</u> Concern with symbols of power in order to have impact on others.	<u>Stamina and adaptability.</u> The energy to sustain long hours of work and flexibility to adapt to changes.
<u>Diagnostic use of concepts.</u> A way of thinking in which known concepts and theories are applied.	<u>Perceptual objectivity.</u> Ability to be objective rather than limited by personal biases, prejudice or preferences.
	<u>Positive regard.</u> Ability to express a positive belief in others.
	<u>Managing group processes.</u> Ability to stimulate others to work together.
	<u>Use of socialised power.</u> Using influence to build alliances, networks, coalitions and teams.
Cluster 2. Directing subordinates	Cluster 4. Leadership
<u>Use of unilateral power.</u> Use of influence to obtain compliance.	<u>Self-confidence.</u> Ability to express confidence and to be decisive.
<u>Developing others.</u> Ability to give feedback and other help to improve performance.	<u>Conceptualisation.</u> Way of thinking in which concepts are used to identify patterns in assorted information.
<u>Spontaneity.</u> Ability to express self freely and easily.	<u>Logical thought.</u> Ability to order events in a causal sequence.
	<u>Oral presentations.</u> Ability to make verbal presentations to others.

TABLE 5.8 - CLASSIFICATION OF THE COMPETENCIES OF SUPERVISORS AND MANAGERS

1. Competencies pertaining to dealing with PEOPLE.
 - 1.1 Those for whom one has responsibility.
 - 1.2 Peers, clients and customers.
 - 1.3 Those to whom one reports.
2. Competencies concerned with MANAGING ACTIVITIES.
 - 2.4 Financial activities.
 - 2.5 Systems control.
 - 2.6 Techniques.
 - 2.7 Functional activities.
3. Competencies reflecting a SENSITIVITY TO ENVIRONMENT with respect to:
 - 3.9 Legal considerations.
 - 3.10 Organisational, social economic and political environment including technological change.
4. Competencies reflecting PERSONAL EFFECTIVENESS.
 - 4.11 Communication
 - 4.12 Numeracy and the use of numerical technique.
 - 4.13 People orientation.
 - 4.14 Results orientation.
 - 4.15 Self-awareness/development orientation.

Coster's (9) study of the training needs of senior civil servants included comprehensive research into the skills and knowledge required by top management. As a result of this research he indentified a group of 'core' competencies, which were needed in all senior grades, and a second group, called 'important' competencies, which were important for many staff though less relevant for some. These competencies, which are listed in Table 5.9, were used in the development of the Senior Management Development Programme (SMDP).

BIM have also carried out research, using survey data, in support of the newly launched BIM Diploma in Management Practice. Details of the findings of this research are shown in Figure 5.2. The findings of these studies can be compared to those identified in the survey of RAOC officers, which was described earlier in this chapter. The survey identified the training needs of Junior Officers (Subalterns), Middle Officers (Captain/Major) and Senior Officers (Lieutenant Colonel and above) and these were included in a Training Needs Profile at Figure 5.1. Discounting, for the purpose of this exercise, the training needs of the Junior Officers, it will be seen that many of the training needs of Middle and Senior Officers are similar to the competencies listed in other studies.

TABLE 5.9 - MANAGEMENT COMPETENCIES

<u>CORE COMPETENCIES</u>	<u>COMPONENT ACTIVITIES</u>
MANAGEMENT OF RESOURCES/ ORGANISATIONS	<ul style="list-style-type: none"> - Setting objectives - Deciding on priorities - Quantifying outputs and measuring performance - Financial management - Value for money principles and techniques
MANAGEMENT OF STAFF	<ul style="list-style-type: none"> - Motivation encouraging staff to give their best - Communicating with staff and listening to their views - Assessing strengths and weaknesses of staff - Delegation/allocation of work - Development of staff
KNOWLEDGE/UNDERSTANDING OF THE CONTEXT OF YOUR WORK	<ul style="list-style-type: none"> - Your role in your own department - The immediate context of your work - Political context - Broader context <ul style="list-style-type: none"> - the private sector - economic/social/technological trends
MANAGING YOUR OWN WORK.	<ul style="list-style-type: none"> - Allocating priorities - Managing your own time - Coping with tight deadlines
INFORMATION TECHNOLOGY	<ul style="list-style-type: none"> - Awareness of its potential use - Ability to make personal use of computerised equipment
MORE SPECIALISED KNOWLEDGE/ EXPERTISE	<ul style="list-style-type: none"> - In your own area of work - Or a specialised function which you may return to
<u>IMPORTANT COMPETENCIES</u>	<u>COMPONENT ACTIVITIES</u>
REPRESENTATIONAL/ PRESENTATIONAL SKILLS	<ul style="list-style-type: none"> - Representing government interest and policies persuasively - Making oral presentations - Negotiating skills - Communicating clearly with the public - Public relations and contact with media
WRITTEN/ADMINISTRATIVE SKILLS POLICY MANAGEMENT	<ul style="list-style-type: none"> - Assessing options and formulating policy - Planning implementation - Assessing performance - General understanding of micro and macro economics - General understanding of the economic basis of and techniques of appraising and costing options and evaluating outcomes
ACCOUNTING AND FINANCE	<ul style="list-style-type: none"> - General principles of management accounting - Investment appraisal
QUANTITATIVE SKILLS/ STATISTICS	<ul style="list-style-type: none"> - General understanding of techniques involving numbers and personal ability to use the simpler techniques - Knowledge of general types of statistical data available, how to get and use them - Knowledge of legislative procedures - Appreciation of general principles of administrative law
INDUSTRIAL RELATIONS	<ul style="list-style-type: none"> - Contact with trade unions - Negotiating skills

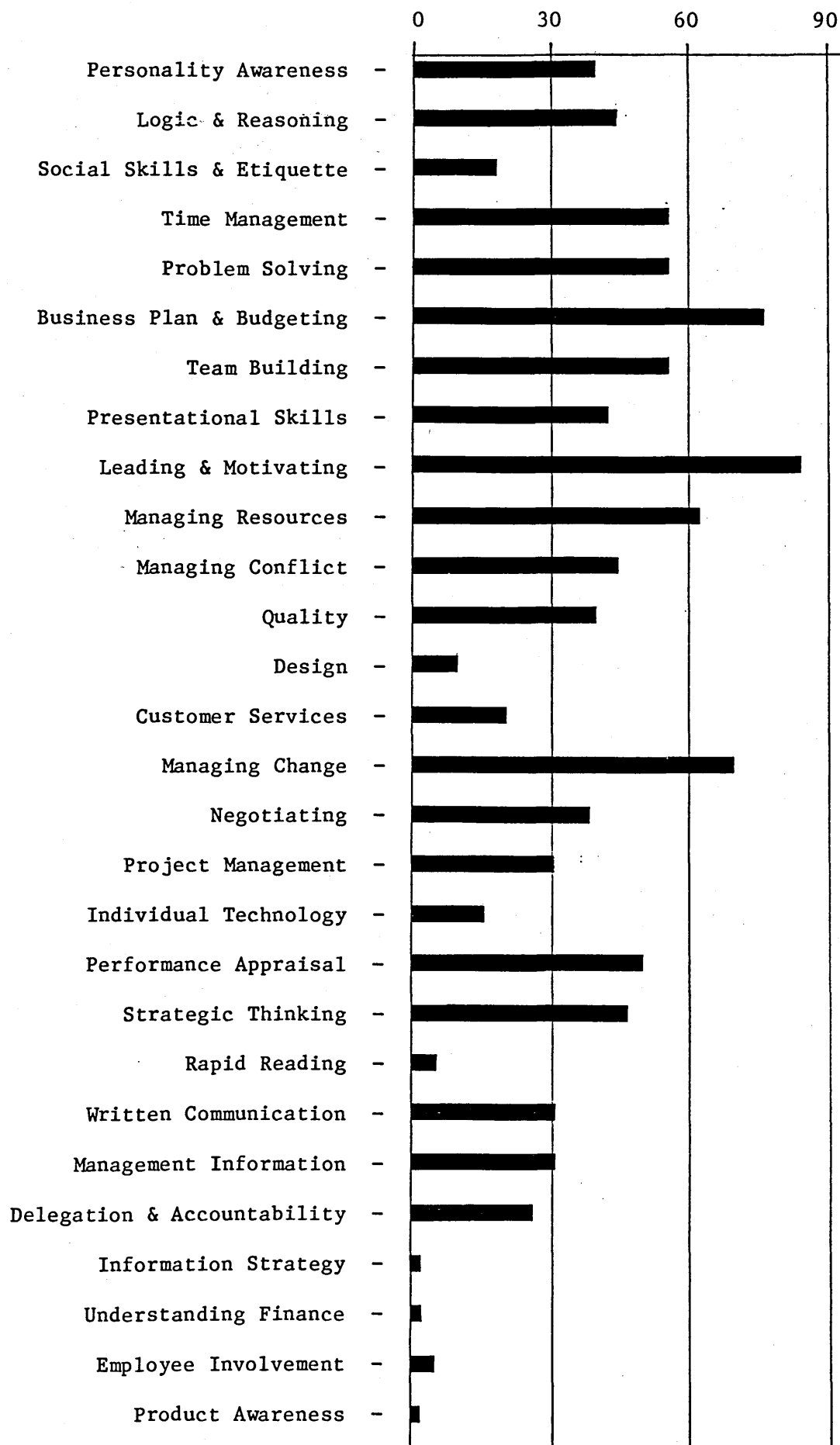


Figure 5.2 - BIM DIPLOMA - COMPETENCIES

The competency approach has not been universally welcomed. Burgoyne (10) and others have serious doubts about the value of a common set of standards. Over simplification of a complex subject area may, in the end, contribute little to the development of better managerial performance. A study commissioned by CMED, through the CNAA, and carried out by the Ashridge Management Research Group (11), was intended to strengthen the argument for a national set of performance criteria. If anything, it has had the opposite effect and one the study's main conclusions is that national criteria "run the risk of becoming irrelevant to the needs of British business and industry". Given differences of definition, perception and interpretation, it is not surprising that there is considerable debate about management competencies. Different situations clearly demand different solutions. Nevertheless, the research to date does give some new insights and it is helpful in the selection of criteria for further exploration. The next stage in this analysis is to relate a basket of competencies to the subjects which are to be found in management or business studies courses.

5.4 MBA COURSE SUBJECTS

The subjects to be found in the prospectuses of most MBA courses fall into two broad categories. A proportion of the subjects are obligatory and are commonly referred to as 'core' subjects. The remainder are usually known as 'optional' or 'elective' subjects, although students will be directed to choose a certain number of these subjects in order to complete the study programme. Inevitably different titles are used to describe what are essentially the same study topics, and in some cases there may be an overlap of content.

Core Subjects. The major areas covered by core subjects fall into three broad divisions depending on the frequency with which they are found in MBA syllabuses. Table 5.10 shows an analysis of the subjects taught as core subjects at a random selection of 10 leading universities or business schools. The most commonly taught core subjects are: Accounting and finance, marketing, business policy, operations management, economics or business economics, and organisational behaviour.

Subjects commonly but less frequently taught are: Human resource management, quantitative methods (including statistics), data analysis and computing, and business environment.

The least common core subjects are:

Public sector management, cost analysis and control, industrial relations, information systems, change management, and market analysis.

TABLE 5.10 - CORE SUBJECTS

SUBJECT	UNIVERSITY									
	B R A D F O R D	C I T Y	C R A N F I E L D	D U R H A M	G L A S G O W	H E N L E Y / B R U N S W I C K	L O N D O N	S H E F F E L D	S T R A T H C L Y D E	W A R W I C K
Accounting & finance	X	X	X	X	X	X	X	X	X	X
Economics/business economics	X	X	X			X	X	X	X	
Human resource management	X	X	X			X	X		X	
Marketing	X	X	X	X	X	X	X	X	X	
Quantitative methods/statistics			X		X		X	X	X	X
Public Sector management							X		X	
Business Policy	X		X	X	X	X	X	X	X	X
Data analysis/computing	X	X	X	X			X			X
Operations management	X	X	X		X		X	X	X	X
Organisational behaviour		X	X	X	X		X	X		X
Cost analysis and control				X			X			
Industrial relations			X	X						
Change management					X					
Business environment	X		X	X						X
Market analysis										X
Information systems			X			X				

Elective Subjects. A wide range of elective subjects are offered by most universities and it will be seen from Table 5.11 that no clear pattern emerges. It should, however, be noted that many of the core subjects can also be studied in greater depth and detail as electives. Similarly some institutions offer optional subjects which are regarded as core subjects at other universities.

Because of the wide variety of appointments which most officers can expect to fill during their career it is suggested that officers selected for higher management courses should, in normal circumstances, follow a generalist course. This should be made up of a number of core subjects and a small number of elective or more specialised topics. Transferring the analysis of desirable competencies to an MBA course structure is only partially successful because some of the necessary skills are not taught on many programmes. It is, however, possible to develop a taxonomy of subjects which are relevant to a wide range of RAOC appointments. The subjects are listed below and, because of the frequent confusion over terminology, a brief description is given of each subject.

Core subjects are as follows:

- a. Information Technology. Basic computing and the design and control of information systems.
- b. Quantitative Methods. Basic statistics and the analysis of management data.
- c. Business Policy. The choice of objectives and strategy and the utilisation of resources to meet corporate goals.
- d. Financial Management. Basic concepts of finance, financial markets, and macro - and micro - economic theory.
- e. Management Accounting. Preparation of financial statements, regulatory frameworks, their application to budgetary planning and control processes.
- f. Organisational Behaviour. People in organisations, organisational structures, organisational psychology and sociology.
- g. Logistics and Operations Management. Practices, concepts and techniques used in manufacturing, distribution and service systems.
- h. Personnel Management. Management of human resources to include manpower planning, development, reward systems and industrial relations.
- i. Business Environment. Political, social, economic and technological factors and their relationships to, and effect on, the organisation.

TABLE 5.11 - ELECTIVE SUBJECTS

SUBJECT	UNIVERSITY									
	B R A D F O R D	C I T Y	C R A N F I E L D	D U R H A M	G L A S G O W	H E N L E Y / B R U N S W I C K	L O N D O N	S H E F F I E L D	S T R A T H C L Y D E	W A R W I C K
Finance and investment	X	X	X	X	X		X	X	X	
Accounting and control			X	X		X	X			X
Business policy	X				X	X	X		X	
Small businesses				X	X		X			X
Business economics	X		X				X			X
Marketing	X	X	X	X	X		X			X
Public Sector management				X	X	X	X		X	
Industrial relations	X	X			X	X			X	
Information and decisions			X	X		X	X			X
Operations management/production	X		X	X	X	X	X			
Design management							X			
Project management			X	X	X					
Operational research										
Organisational behaviour				X		X	X	X	X	
International business	X	X		X			X		X	X
Law				X					X	
Manufacturing				X	X					X
Computing/information technology					X			X	X	
Technological innovation					X				X	X
Market research								X		
Macroeconomics								X		
Management science	X									X
Management of change										X
Human resource management	X		X							X
Corporate planning	X		X		X					X
Public relations			X							

- j. Interpersonal Skills. Communication skills, leadership studies, the management of change and conflict.

Elective subjects might include the following:

- a. Project Planning. The management of a complex project.
- b. Management Science. Operational research, forecasting, modelling and simulations.
- c. Technological Innovation. Impact of innovation and design, and the management of change.
- d. Industrial Relations. Trade unions, collective bargaining, worker participation etc.
- e. Marketing. The marketing mix, market analysis, public relations etc.
- f. Training. Management and control of training, development of personnel.

5.5 ANALYSIS OF RAOC OFFICER POSTS

In order to validate the selection of these core and subsidiary subjects, and to determine the extent to which each of the subjects was likely to be relevant to RAOC officer appointments, an analysis of appointments was carried out. A total of 287 job descriptions and/or job specifications were analysed. Of these 212 were Major appointments and 75 were Lieutenant Colonel appointments.

Methodology. Major and Lieutenant Colonel appointments were analysed separately. The main elements of each appointment were isolated to see how essential knowledge of each core subject would be to the satisfactory performance of the job. One point was allocated for each core subject. A second pass was made to determine the extent to which knowledge of core and subsidiary subjects might be desirable for satisfactory performance. Half of a point was allocated for each subject selected in this way. Points were then totalled to give each appointment a 'managerial content' score. The data was then manipulated to show which were the most prevalent core and subsidiary subjects. The data was also analysed by the type of appointment. In this additional analysis posts were divided into four categories: staff appointments; depot appointments; command appointments; training appointments. The units to which the various appointments belong were also analysed in four categories: depot units; field force units; headquarter units (at formation level); training establishments. The geographic locations were also quantified, but this was not considered significant.

Limitations. Job analysis is, as Camp et al (12) emphasise, a complex task for which there is a wide range of techniques. Observation, work sampling, discussion and questionnaires may all have a role to play and will help to identify the skills, knowledge and attributes required to perform a task satisfactorily. They will also help to establish the frequency of performance and the degree of difficulty of each component of a specific post. A simple analysis of job descriptions and specifications is a poor and perhaps superficial substitute which relies heavily on the accuracy of the documentation and the experience of the person carrying out the analysis. It was, nevertheless, considered to be appropriate for the purposes of this research, which is concerned primarily with aggregate data and not individual posts. The scoring system is also a little artificial as some jobs are specialist appointments which require a great deal of expertise in a fairly narrow area. Jobs with variety are likely to score higher. It is worth recording that many of the job descriptions and job specifications submitted by units were not up to date and several units claimed that their job descriptions/specifications were "in the process of being rewritten".

Findings. The findings are presented in two main sections in accordance with the ranks of the posts in the analysis. These ranks were chosen as they are those most likely to be held in the years immediately following attendance at a higher management education course.

Major Appointments. There are 329 regular Major appointments in the Corps and 212 appointments were analysed (65%). The appointments can be broken down as follows:

- a. Type of Appointment
- | | | | |
|-----|----------|---|-----|
| (1) | Staff | - | 107 |
| (2) | Depot | - | 56 |
| (3) | Command | - | 36 |
| (4) | Training | - | 13 |
- b. Type of Unit
- | | | | |
|-----|--------------|---|-----|
| (1) | Headquarters | - | 106 |
| (2) | Field Force | - | 34 |
| (3) | Depot | - | 56 |
| (4) | Training | - | 16 |

c. Location

(1)	United Kingdom (including Northern Ireland)	-	129
(2)	BAOR (including Berlin and Antwerp)	-	68
(3)	Others	-	15

The relevance of the core and subsidiary subjects to these appointments is shown in Table 5.12. it will be seen that the most frequently occurring core subjects are Interpersonal Skills, Logistics and Operations Management, Business Policy, and Personnel Management. The most frequently occurring subsidiary subjects are Quantitative Methods, Training, Management Accounting, Financial Management and Organisational Behaviour. When core and subsidiary subject percentages are combined Interpersonal Skills, Logistics and Operations Management, Business Policy, and Quantitative Methods are a feature of over 90% of all appointments. It should be noted that 'contracts' has been added as a subsidiary subject to the initial list as it now appears as a responsibility in a significant number of appointments. It is not addressed in training at present.

TABLE 5.12 - CORE AND SUBSIDIARY SUBJECTS - MAJORS

Subject	Core	Subsidiary	Total
	%	%	%
Information Technology	8	33	41
Quantitative Methods	15	75	90
Business Policy	79	15	94
Financial Management	8	50	58
Management Accounting	23	53	76
Organisational Behaviour	7	49	56
Logistics and Operations Management	85	15	100
Personnel Management	76	16	92
Business Environment	6	41	47
Interpersonal Skills	100	0	100
Project Planning		10	10
Management Science		1	1
Technological Innovation		7	7
Industrial Relations		2	2
Marketing		1	1
Training		54	54
Contracts		22	22

The average 'managerial content' score of all 212 appointments is 6.30, with a high of 10.0 and a low of 4.5. Appointments with high scores include Planning Officers, the majority of Company Commanders and Management Wing instructors at the School of Ordnance. When the 'managerial content' scores are averaged by type of appointment and type of unit the following scores are obtained:

a. Type of Appointment

(1)	Staff	-	6.19
(2)	Depot	-	6.04
(3)	Command	-	7.26
(4)	Training	-	6.07

b. Type of Unit

(1)	Headquarters	-	6.23
(2)	Field Force	-	7.04
(3)	Depot	-	6.33
(4)	Training	-	6.09

Lieutenant Colonel Appointments. There are 113 Lieutenant Colonel appointments in the Corps and 75 appointments were analysed (66%). The appointments can be broken down as follows:

a. Type of Appointment

(1)	Staff	-	34
(2)	Depot	-	12
(3)	Command	-	25
(4)	Training	-	4

b. Type of Unit

(1)	Headquarters	-	39
(2)	Field Force	-	7
(3)	Depot	-	20
(4)	Training	-	9

c. Location

(1)	United Kingdom (including Northern Ireland)	-	58
(2)	BAOR (including Berlin and Antwerp)	-	14
(3)	Others	-	3

The relevance of the core and subsidiary subjects to these appointments is shown in Table 5.13. It will be seen that the most frequently occurring core subjects are the same as for Major appointments and there are only slight variations in the subsidiary subjects. When core and subsidiary subject percentages are combined Interpersonal Skills, Logistics and Operations Management, Personnel Management and Business Policy are a feature of every appointment.

The average 'managerial content' score for the 75 appointments is 7.28 which is appreciably higher than the average for Majors and reflects the greater span of responsibility. There is a high of 10.5 and a low of 5.5. Appointments with high scores include Chief Planning Officers, Battalion Commanders and one or two staff appointments with wide ranging responsibilities. When the 'managerial content' scores are averaged by type of appointment and type of unit the following scores are obtained:

a. Type of Appointment

(1)	Staff	-	6.85
(2)	Depot	-	7.58
(3)	Command	-	8.24
(4)	Training	-	7.00

b. Type of Unit

(1)	Headquarters	-	7.29
(2)	Field Force	-	7.78
(3)	Depot	-	7.57
(4)	Training	-	6.88

TABLE 5.13 - CORE AND SUBSIDIARY SUBJECTS - LIEUTENANT COLONELS

Subject	Core	Subsidiary	Total
	%	%	%
Information Technology	10	40	50
Quantitative Methods	10	74	84
Business Policy	92	8	100
Financial Management	13	57	70
Management Accounting	12	61	73
Organisational Behaviour	36	46	82
Logistics and Operations Management	97	3	100
Personnel Management	87	13	100
Business Environment	33	52	85
Interpersonal Skills	100	0	100
Project Planning		12	12
Management Science		3	3
Technological Innovation		15	15
Industrial Relations		13	13
Marketing		6	6
Training		69	69
Contracts		13	13

Conclusions. The analysis of job descriptions/specifications confirmed the initial selection of possible MBA course subjects and the relevance of these subjects to a wide cross-section of Major and Lieutenant Colonel appointments. The taxonomy of subjects will provide useful guidelines when evaluating the relative merits of the various institutions offering courses for which RAOC officers might be nominated. The analysis also served to highlight those posts with a high managerial content. There were no real surprises. The information provided by this analysis could be used when selecting officers to fill specific appointments. The analysis established that a wide spectrum of managerial knowledge and skills are required in the majority of RAOC appointments. This supports the view that higher management education for RAOC officers should be generalist in nature with a preferred format which offers a substantial number of core subjects and a small number of elective or specialist topics. Too narrow a field of study produces specialists with limited employability.

REFERENCES

- (1) Jones J E & Woodcock M, "Manual of Management Development", Gower, 1985.
- (2) Peel M, "Management Development & Training", BIM, 1984.
- (3) Mangham I L & Silver M S, "Management Training: Context and Practice", University of Bath, 1986.
- (4) Ascher K, "Management Training in Large UK Business Organisations - A Survey", Harbridge House, 1983.
- (5) Airey F & Goodman M N, "A Survey of Distance Education in Industry Training", Harbridge House, 1986.
- (6) R E Boyatzis, "The Competent Manager", Wiley, 1982.
- (7) E A Powers, "Enhancing Managerial Competence: The American Management Association Competency Programme", The Journal of Management Development, Vol 6 No 4, 1987.
- (8) H F Evarts, "The Competency Programme of the American Management Association", Industrial & Commercial Training, Vol 19 No 1, Jan/Feb 1987.
- (9) P R Coster, "Training for Senior Management Study", Cabinet Office (Management and Personnel Office), 1984.
- (10) J Burgoyne, "Competency Approaches to Management Development", Paper given at AMED Conference, Ashridge, Jan 1989.
- (11) "Survey of Current Practice in Assessing Management Competencies", CNA/TA/Ashridge Management Research Group, Sep 1988.
- (12) R R Camp, P N Blanchard & G E Huszycz, "Toward a More Organizationally Effective Training Strategy & Practice", Prentice-Hall, 1986.

CHAPTER 6

SURVEY OF POSTGRADUATE STUDENTS

6.1 INTRODUCTION

Each year the Corps selects six officers to receive postgraduate management education. The courses which they attend were described in Chapter 4. Although this involvement with higher management education has a long history, little effort has been made to evaluate the benefits which RAOC has derived over the years. In order to rectify this, and to obtain feedback on the experiences of those officers who have received postgraduate management education, a questionnaire based survey was carried out. This was supplemented by informal discussions with a cross-selection of officers. This chapter describes the conduct and findings of the survey.

6.2 EVALUATION OF CURRENT COURSES

Methodology. The survey was designed to obtain the views and opinions of those officers who have actually experienced postgraduate management education. Information on the relevance and value of that education to their subsequent careers was sought. Officers were also given an opportunity to express any opinions which they might have on the future of management education and training in the Corps. It was clearly not feasible to contact all those RAOC officers who have received postgraduate management education. Many have long since retired and some will be deceased. It was, therefore, decided to confine the sample to all those officers who have attended UMIST and CIT since 1974/75, up to and including 1986/87. This gave a total potential sample of 102 officers. Army records indicated that 16 officers have retired from the British Army, although 5 of these are believed to be serving in the Australian Army. Because of the nature of the survey it was not possible to make it anonymous, although all addressees were assured that their responses would be treated in the strictest confidence. This approach has both benefits and disadvantages. Knowledge of who was returning questionnaires enabled hastening action to be taken in the case of late returns, but one or two officers preferred to withhold their views because of the lack of anonymity. A copy of the questionnaire which was used is at Annex F.

Questionnaire Construction. The questionnaire was in four sections:

- a. Section 1 - 'Biographical Details'. In this section respondents were asked to give details of their previous educational qualifications prior to completing their postgraduate management course.

- b. Section 2 - 'Your Postgraduate Management Course'. This section was designed to elicit information on the officer's personal experience of the course which he attended.
- c. Section 3 - 'Appointments Held'. This section looked at the relevance of the individual's training to the appointments which have been held since attending the course. This required respondents to complete a career history proforma. Officers who have retired from the British Army were asked to give brief details of their current occupations.
- d. Section 4 - 'Future Training'. This final section was designed to obtain views on management education issues which may affect the way in which RAOC carries out this type of training in the future.

The questionnaire deliberately included several questions that have been used in other surveys which have examined aspects of postgraduate management education. This was done for a number of reasons but mainly to enable the findings of this survey to be correlated with those of other (civilian) studies. The limitations of questionnaires as a means of sampling opinion were outlined in Chapter 5. Given sufficient time, and financial resources, an interview technique would have been preferred in this study. Informal discussions with a number of respondents partially overcame the limitations of the survey and contributed to some of the conclusions reached in the analysis of data.

The questionnaire was piloted by means of guided interviews with a small number of officers. This helped to identify several potential ambiguities which were then corrected. The importance of piloting cannot be over-emphasised. It certainly proved beneficial in this instance as none of the returns needed to be eliminated from the sample because of confusion or inaccuracy. Because of the comparatively small size of the sample it was necessary to include the responses of those officers who participated in the piloting exercise in the overall analysis of data.

The questionnaires were despatched, with a covering letter signed by the Commandant, School of Ordnance, on 28 Oct 87. Addressees were asked to return completed questionnaires by 27 Nov 87. In the event, and partly because of hastening action, the final questionnaire was not returned until Feb 88. A total of 102 questionnaires were sent out and 84 returns were received. The response rate was, therefore, just over 82% - which is very high for a survey of this nature. Only

6, from a potential 16, responses were received from officers who have now retired from the British Army, which serves to depress the overall response rate.

6.3 SURVEY FINDINGS

Section 1 - Biographical Details. This section asked for brief biographical details including rank, name, current appointment and the like. Information was also sought about previous educational qualifications and specialist military qualifications. The most significant findings are listed below:

a. Current Rank. (Question 3). The respondents comprised 1 Colonel (1%), 24 Lieutenant Colonels (29%), 53 Majors (63%) and 6 civilians (7%). On their retirement, two of the civilians had held the rank of Lieutenant Colonel and four had been Majors.

b. Educational Qualifications. (Question 4). Educational qualifications attained prior to attending a postgraduate management course are shown on Table 6.1. It should be noted that the three officers shown as having no qualifications were commissioned from the ranks and would have obtained the appropriate military educational qualifications. Respondents were not asked to indicate the number of GCE 'O' and 'A' level passes but many chose to do so. The statistics in Table 6.1 indicate "one or more" passes only.

TABLE 6.1. - EDUCATIONAL QUALIFICATIONS

Qualification	Number of Respondents	% of Respondents
First Degree	12	14
Membership of Professional Institute	29	34.5
HNC/HND	3	3.5
Teaching Qualification	4	5
ONC/OND	5	6
GCE 'A' Levels	55	65.5
GCE 'O' Levels	81	96.5
No Educational Qualifications	3	3.5

c. Military Qualifications. (Question 5). Respondents were asked to give details of their specialist military qualifications, which are normally obtained by attending a long course. Details are shown in Table 6.2. It should be noted that some officers reported holding more than one qualification and that some officers have gained their 'sq' qualification since attending their management education course. This figure is, therefore, higher than anticipated. All officers in the sample will, of course, have qualified to have 'im' shown after their name in military records, by virtue of having completed their management education course.

TABLE 6.2 - MILITARY QUALIFICATIONS

Qualification	Number of Respondents	% of Respondents
'sq' (staff qualified)	32	38
'ato' (ammunition specialist)	26	31
'pi' (petroleum specialist)	16	19
'fs' (food supply specialist)	2	2.5
'aic' (vehicle specialist)	5	6

Section 2 - Management Course Attended. (Questions 6-10). This section looked in detail at the postgraduate management course attended by respondents and their opinions about the training received:

a. Base Data. Of those returning questionnaires, 77 had attended UMIST and 7 CIT. This was a 100% response from Cranfield graduates but only 81% in the case of UMIST. The GMAT filter was introduced in 1980/81 and slightly more than half (52%) of the officers in the survey indicated that they had taken the test. As a result of their studies 51 received an MSc degree. One officer has not completed his studies and must resubmit his dissertation. In recent years 8 officers who had originally registered for the Diploma course were able to convert to an MSc course by virtue of their performance during the initial, taught, phase of the course.

b. Course Structure. (Question 11). Respondents were asked to describe the structure of the course they attended. 64% indicated that their course consisted of a number of core subjects with specialist options, whilst 32% stated that they were faced with a limited range of options from the outset. (4% were undecided). This is consistent with the changes in structure which the UMIST course, in particular, has undergone in the last decade.

c. Subjects Studied. (Questions 12 and 13). Officers were asked to list the main and subsidiary subjects which they studied. The main subjects are shown in Table 6.3 and subsidiary subjects in Table 6.4. Once again the responses are partly the result of the changes in course structure in recent years. Some officers have nominated the areas in which they undertook research as their main subjects when in reality they would have studied a 'basket' of equally weighted subjects prior to embarking on a research project. The details are also indicative of the wide range of subjects which have been studied by individual officers and the expertise which is available to the Corps in some of these disciplines. It should also be noted that all students are taught basic computing skills and all study research methodology, either formally as a taught course or informally while carrying out a research project.

d. Relevance of Subjects Studied. (Question 24). Using a similar format to that developed by Forrester (1), officers were asked to relate topics in a list of typical management education syllabus subjects which they had studied to appointments which they were holding, or had held, and indicate the extent to which these subjects had been useful in their various appointments. A 5 point rating scale was used ranging from 'essential' to 'of no value'. They were also asked to

TABLE 6.3 - MAIN SUBJECTS STUDIED

Subject	Number of Students	% of Students
Personnel Management	12	14
Distribution Management	7*	8
Production Management	12	14
Marketing	7	8
Organisational Sociology & Psychology	8	9.5
Operations and Logistics Management	7	8
Industrial Relations	8	9.5
Managerial Economics	3	3.5
Finance and Control	1	1
Organisational Behaviour	6	7
International Business	2	2.5
4 Equally Weighted Subjects	12	14

(Note *All CIT students)

TABLE 6.4 - SUBSIDIARY SUBJECTS STUDIED

Subject	Number of Students	% of Students
Behavioural Science	40	48
Quantitative Methods	36	43
Finance and Control	30	36
Marketing Management	30	36
Production Management	28	33
Personnel Policies	25	30
Industrial Relations	17	20
Managerial Economics	13	16
Management of Technological Innovation	11	13
Public Sector Economics	10	12
Organisational Sociology	10	12
Industrial Psychology	8	10
Operations and Logistics Management	8	10
Transport Technology	7	8
Information Technology	7	8
Warehouse Technology	7	8
Cost and Management Accounting	6	7
Operational Research	5	6
International Business	4	5
Selection and Assessment	4	5
Systems Analysis	4	5

indicate whether too much or too little time has been given to these subjects during the course. The results of this question are shown in Table 6.5, in rank order by average score. Bearing in mind that this table only refers to topics actually studied by respondents and then later used in their subsequent appointments there were few surprises. In one or two cases quite high rankings may be the result of a comparatively small sample. One would expect some correlation with the findings of the job analysis exercise reported in Chapter 5 and this is evident in the ranking of many of the subjects. Operations and Logistics Management, Personnel Management (or Human Resource Management), Interpersonal Skills, and Quantitative Methods rank highly in both cases. Also of interest is the overall degree of benefit which past students claim to have derived from their course. 75% of the material appears to have been of some value and this compares favourably with Forrester's study in which he found that 52% of his sample regarded the subjects studied of 'much use' or 'essential'. In the main, details about the proportion of time devoted to each subject are inconclusive. In many instances those who would have liked more time on a given subject were cancelled out by those who thought too much time was allocated. However, as was the case in Forrester's study, the overall response was that too little time was spent on many of the subjects, and in particular on those which have been of most value. Although respondents were invited to add more subjects to the list in the questionnaire, very few did so and no additional subjects were listed in sufficient numbers to be significant.

e. Selection of Subjects. (Question 29). Officers were asked if they would have changed the main or subsidiary subjects which they studied if they had known the appointment to which they were to be posted on completion of the course. Although the overwhelming majority said 'No', 15.5% said they would have selected a different main subject and 28.5% said they would have opted for different subsidiary subjects.

f. Research Topics. (Questions 14-23). Students at both UMIST and CIT spend approximately one-third of their course carrying out a research project which culminates in the submission of a dissertation or thesis. These are thorough and comprehensive pieces of work and a large number of man-hours are devoted to their completion. The selection of an appropriate topic for research can create a great deal of tension. It must satisfy academic criteria, it must be of interest to the student and, ideally, the Army should obtain

TABLE 6.5 - RELEVANCE OF SUBJECTS STUDIED

Subject	Total Respondents	Average Score	Number of Respondents in Each Category					Time on Course		
			Essential	4	3	2	None	Too little	Too much	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	
			5				1			
Information Technology	27	4.18	10	12	5	0	0	13	0	
Project Management	28	4.00	7	15	5	1	0	10	0	
Operations & Logistics Management	29	3.90	10	10	5	4	0	12	1	
Management of Change	40	3.90	10	18	10	2	0	15	3	
Leadership/Interpersonal Skills	39	3.89	13	18	2	3	3	13	2	
Distribution Management	27	3.85	7	10	7	2	1	9	1	
Human Resource Management	45	3.66	9	20	8	8	0	15	2	
Quantitative Methods	51	3.57	8	23	13	4	3	13	9	
Behavioural Science	53	3.54	9	18	22	1	3	17	7	
Corporate/Strategic Planning	37	3.41	6	14	9	5	3	8	6	
Industrial Relations	53	3.32	11	13	15	10	4	7	8	
Organisational Psychology	39	3.28	4	16	11	3	5	11	4	
Organisational Structures	41	3.24	3	13	19	3	3	10	4	
Management Economics	31	3.13	2	10	10	8	1	6	7	
Financial Management	38	3.10	4	13	9	7	5	13	6	
Research Methodology	48	3.08	7	9	17	11	4	11	7	
Management Accounting	36	3.00	4	15	7	9	1	12	5	
Business Environment	26	2.88	0	6	13	5	2	5	4	
Public Sector Management	24	2.87	1	5	11	4	3	7	7	
Technological Innovation	37	2.86	4	9	10	6	8	7	11	
Organisational Sociology	37	2.78	4	6	12	8	7	4	7	
Business Policy	26	2.76	1	4	12	6	3	4	5	
Production Management	44	2.54	2	8	13	10	11	3	13	
Marketing Management	44	2.23	1	5	11	13	14	4	19	
Overall Totals	900		137	290	256	133	84	229	136	
%			15	32	28.5	15	9.5			

some benefit from the study. A number of questions were posed in the survey to establish the reality of the situation. The majority of research studies have been individual projects (76%). Only 20 students in the survey have carried out joint projects and these were all UMIST diploma students. Officers were asked why they selected their particular topic for research. The overwhelming majority (67%) stated 'personal interest'. 29% stated that their research was of direct interest to the Army and RAOC and a further 10% indicated that their research was of direct interest to RAOC only. However, only 19% of all studies were set in a purely military context. 32% of all respondents claimed to have military clearance before embarking on their research. The majority of these are more recent graduates and this reflects a tightening of procedures in the last few years. Of those who carried out research of relevance to the Army or RAOC a little over one-third stated that their dissertation had recommended changes to current Army or RAOC procedures. Only 3 officers reported having seen any of their recommendations implemented. When asked if they would have changed their research topic had they known which appointment they were to assume after completing their course, 25% indicated that they would have done so. Claims that much of the research undertaken has indirect relevance to the Army or to the Corps are fairly tenuous and appear to be based on intangible benefits to the individual. Transferable skills, such as knowledge of research methodology procedures, are undoubtedly useful but a valuable opportunity to research real military problems is not being used. A list of research topics which have been undertaken is at Annex G.

g. Benefits of Course. (Question 26). Respondents were asked to rank up to 5 selections from a list of 10 commonly cited benefits of management education. Most people selected 5 benefits and an analysis of these selections is shown in Table 6.6. "Helping you to see your job and organisation in a wider context" was ranked first by a wide margin and the next three selections were closely grouped. A ranking based only on first choice selections modified the list slightly. A similar question was used in a survey conducted by the Stoddart Working Party (2), which was one of the four Working Parties set up as part of the Constable/McCormick study and their findings are also shown for comparative purposes. As one would expect, military personnel have a slightly different perception of the

TABLE 6.6 - BENEFITS OF MANAGEMENT EDUCATION

Benefit	Ranking based on:		
	Overall Selections	First Choice Benefit	Stoddart Working Party Ranking
Helping you to do your present job better.	5	4	1=
Making you better able to get your ideas across to people.	10	10	9
Acquiring skills which you particularly needed at the time.	9	9	6=
Helping you get up to date with modern management.	2	5	6=
Helping you get the best out of other people.	6	6=	8
Helping you to see your job and organisation in a wider context.	1	1	4
As planned preparation for a more senior position in the organisation.	8	8	5
Improving your prospects of promotion.	7	6=	10
Providing a basis for further career development	3	2=	1=
Providing you with a formal qualification which would increase your employability.	4	2=	3

benefits of management education. Officers were not confined only to the benefits listed in the questionnaire. They were given an opportunity to add any additional benefits which they considered important and to list any negative factors or shortcomings in the course they attended:

(1) Additional Benefits. (Question 27). The majority of respondents listed a number of additional benefits. These mainly centred on the opportunity to get away from the Army for a year, in order to broaden the mind and receive intellectual stimulus from a non-military peer group. Other individual benefits mentioned included improved self-confidence, and enhanced status as a result of obtaining educational qualifications. One or two officers highlighted organisational benefits such as the improved image of RAOC, which stems from having a nucleus of well educated officers, and the opportunities afforded for comparing modern commercial and industrial practices.

(2) Negative Factors. (Question 28). Some officers were clearly dissatisfied with the content, structure and delivery of their courses. Poor standards of instruction were often mentioned and some considered the course to be too theoretical and not sufficiently practical and of limited relevance to RAOC. Some officers would have welcomed more direction from the Corps, whilst others felt that too many constraints were imposed. One or two officers said that the course made them dissatisfied with military life or frustrated at not being able to put their new found skills and knowledge to better use in the Army. A number of officers regretted that a diploma was the only qualification available at the time they attended their course and one officer highlighted the fact that attendance at UMIST caused the loss of a Confidential Report, which could affect promotion prospects.

h. Personal Experience of Course. (Question 30). Officers were asked to comment on six aspects of their course including administration, facilities and teaching standards. These were rated using a 5 point scale and scores were averaged to provide the details shown on Table 6.7. In general terms most students were reasonably satisfied with the library and computer facilities, and they clearly got on very well with the university lecturers. However, the standard of teaching sometimes left something to be desired and both military and university administration was only satisfactory.

TABLE 6.7 - PERSONAL EXPERIENCE OF COURSE

Factor	Rating	Rank
Standard of teaching	3.37	5
Relationship with lecturers	4.37	2
Library facilities	4.50	1
Computer facilities	3.86	3
University administration	3.27	6
Military administration	3.58	4

i. Appointments Post Attending Course. (Question 31).

Officers were asked to list three types of appointments for which they considered they were best equipped after completing postgraduate management education. Their responses were quite varied. Some were very specific (e.g. Officer Commanding, Materials Handling Trials Unit), whilst others were much more general (e.g. sub-unit command). The most frequently occurring appointments are listed in Table 6.8. The over-riding impression given is that officers consider themselves widely employable, although emphasis is given to the type of appointment where specific elements of their course might be utilised. The diversity of appointments listed is, of course, to some extent a reflection of the wide range of subjects officers choose to study whilst at university.

j. Previous Management Training. (Question 32 and 33). A question asking respondents to give details of management training or education received before attending a postgraduate management course did not elicit very much useful information. A majority of officers included RMAS, the Ordnance Officers' Course and similar military courses in their response. A small number of officers had attended civilian courses prior to joining the Army.

TABLE 6.8 - SUITABLE APPOINTMENTS FOR
MANAGEMENT TRAINED OFFICERS

Appointment	Rank	% Selecting
Planning Officer	1	54
RAOC Staff Officer	2	49.5
General Staff	3	45
Sub-unit Command	4	43.5
Depot Operations	5	37.5
Personnel Management	6	19.5
Project Management	7	18
Management Training	8	12
Defence Sales	9	3
Recruiting	10	3
Others*	---	3

(Note *includes statements such as "all",
"none", "civilian" and "any S01 appointment"!)

k. Management Training Received After Postgraduate Course. (Question 34 and 35). Almost 30% of respondents have received further management training or education since completing the university course. The majority of these have attended short military courses (eg Corporate Planning at RMCS, financial management and equipment management courses). Two officers have completed a PhD, five have taken Open University courses and a few have attended other civilian courses.

l. Membership of Professional Institutes. (Question 36 and 37). Over half of all officers in the survey (52%) are members of one or more Professional Institutes. The institutes to which they belong are listed in Table 6.9. BIM is the most common of the institutes listed and there are a large number with only one or two members in this survey. Participation in the activities of an institute is frequently confined to reading the professional journal of the institute or society. Less than 50% of members attend meetings and only 25% attend conferences. Any other form of participation, such as the holding of committee or other offices, or the submission of papers to conferences or journals is minimal.

TABLE 6.9 - MEMBERSHIP OF PROFESSIONAL INSTITUTES

<u>Institute</u>	<u>Number of Members in Survey</u>
British Institute of Management	28
Institute of Logistics and Distribution Management	5
Institute of Petroleum	5
Institute of Explosive Engineers	5
Institute of Materials Management	2
Institute of Purchasing and Supply	2

The following have one member - British Computer Society, Institute of Management Services, Institute of Training and Development, Chartered Institute of Transport, Institute of Administrative Accountants, Chartered Institute of Management Accountants, Institute of Occupational Safety and Health, Institute of Directors, Association of MBAs, Association for Management Education and Development, Institute of Quality Assurance.

Section 3 - Appointments Held. This section was designed to obtain further information on the relevance of the postgraduate management education received by officers to appointments held since completing the course. Officers were asked to compile a proforma on which they gave brief details of each post held, the managerial content of the post, those elements of their training which were relevant to the post, and any training needs not met by that training which would have been of benefit to the post. This section required a substantial amount of detail, particularly from those officers who have held a number of appointments since finishing their course, and it was not always completed as fully as one would have hoped. Nevertheless, the information provided is useful and interesting, both from the point of view of the appointments which have been held and the relevance of management education to those appointments.

a. Appointments Held. The 84 respondents have held a total of 289 appointments. One is currently holding a Colonel's post, 28 have held (or are holding) Lieutenant Colonel appointments and the remaining 260 are Major appointments. Using the classification of appointments introduced in Chapter 5, but adding a fifth category to cover non-RAOC (E2) staff appointments, exchange postings, and loan service tours of duty, a more comprehensive breakdown is shown in Table 6.10.

TABLE 6.10 - APPOINTMENTS HELD (by Type)

Type of Appointment	Rank	
	Major	Lieutenant Colonel
Staff (RAOC)	105	13
Depot	55	3
Command	39	6
Training	16	2
Others (inc E2 Staff, exchange etc)	45	4
TOTALS	260	28

b. Initial Appointments. The first appointment to which officers are posted on completing their course has been analysed. 32 officers (38%) have held Depot appointments, mainly as Planning Officers. 25 officers (30%) have held Grade 2 (Major) staff appointments in RAOC - tied posts. 12 officers (14%) have held either E2 staff appointments or exchange postings in the USA. 9 officers (11%) - and this is a comparatively recent development - have proceeded direct to sub-unit command appointments. The remaining 6 officers (7%) have held training appointments. These figures support the view that management trained officers are widely employable, but they also indicate that most postings are for career development purposes as much as to utilise the specialist knowledge and skills which have been acquired. When figures for the initial appointment are matched with those in Table 6.10, some interesting trends emerge. Very few officers who do not fill a Depot appointment as their initial posting after completing management education subsequently receive a posting to a Depot, but a large number go on to staff and sub-unit command appointments. A similar pattern prevails at Lieutenant Colonel rank, although the size of the sample is very small.

c. Management Content. The management content of all posts as described by respondents is summarised in Table 6.11. The descriptions used by officers have been 'massaged' into the

same taxonomy of core and subsidiary subjects used in Chapter 5. The important figures in this table are those showing the percentage of references by respondents. Once again there is a good correlation between the job analysis findings and those arising from the officers' own descriptions of the management content of posts they have held. A comparison between the management content of Major and Lieutenant Colonel posts shows a slight switch in emphasis which was not so apparent in the job analysis statistics. The relative importance of two of the subsidiary subjects - project planning and industrial relations - is further emphasised in Table 6.11.

TABLE 6.11 - MANAGEMENT CONTENT - BY RANK

Subject	Rank					
	Major		Lieutenant Colonel		Aggregate	
	Number	%	Number	%	Number	%
<u>Core</u>						
Information Technology	46	17.7	11	39.3	57	19.8
Quantitative Methods	96	36.9	13	46.4	109	37.8
Business Policy	14	5.4	10	35.7	24	8.3
Financial Management	57	21.9	10	35.7	67	23.3
Management Accounting	11	4.2	3	10.7	14	4.9
Organisational Behaviour	98	37.7	12	42.9	110	38.2
Logistics and Operations Management	72	27.7	12	42.9	84	29.2
Personnel Management	80	30.8	14	50.0	94	32.6
Business Environment	0	0	0	0	0	0
Interpersonal Skills	31	11.9	6	21.4	37	12.8
<u>Subsidiary</u>						
Project Planning	37	14.2	4	14.3	41	14.2
Management Science	5	1.9	1	3.6	6	2.1
Technological Innovation	7	2.7	3	10.7	10	3.5
Industrial Relations	51	19.6	6	21.4	57	19.8
Marketing	16	6.2	5	17.9	21	7.3
Training	1	0.4	0	0	1	0.3
Contracts	2	0.8	0	0	2	0.7

d. Content by Type of Appointment. Further analysis was carried out to see if there were significant differences between the management content of the five types of appointment listed in Table 6.10. The results of this analysis are shown in Table 6.12. Majors and Lieutenant Colonel appointments are aggregated in this table and, as before, the important figures are those showing the percentage of references each subject received. High percentages in all types of appointment include Organisational Behaviour, Operations and Logistics Management, Quantitative Methods, and Personnel Management. Most of the variations between types of appointment could have been predicted. Depot appointments, for example, score highest on Operations and Logistics Management and Industrial Relations. Command appointments score highest on Personnel Management and Organisational Behaviour, whilst Quantitative Methods feature strongly in staff appointments.

e. Training Needs. Comparatively few officers listed subjects knowledge of which they considered would have enhanced their performance in specific appointments. This may reflect a natural reluctance to highlight apparent shortcomings. The data provided has been analysed, and the results are shown in Table 6.13. Aggregate findings only are shown and it can be seen that, statistically, the only significant subjects to be mentioned are Operations and Logistics Management, Financial Management, and Information Technology. These are, however, fundamental subjects and clearly require more attention in many cases.

f. Second Careers. (Questions 39-44). Several questions in this section were addressed to officers who have retired from the Army. Unfortunately only 6 out of 16 officers who have left the Army responded and they do not provide a representative sample. It is, however, interesting to note that while all but one retired officer stated that the decision to leave the Army was not influenced by the fact that they held a postgraduate management qualification, four respondents indicated that the qualification was "important" or "useful" in securing their present employment.

TABLE 6.12 - MANAGEMENT CONTENT - BY TYPE OF APPOINTMENT

Subject	Type of Appointment									
	RAOC Staff		Depot		Command		Training		Others	
	Number	%	Number	%	Number	%	Number	%	Number	%
<u>Core</u>										
Information Technology	17	14.4	17	29.3	7	15.6	2	11.1	14	28.6
Quantitative Methods	48	40.7	23	39.7	10	22.2	6	33.3	22	44.9
Business Policy	12	10.2	3	5.2	4	8.9	2	11.1	3	6.1
Financial Management	29	24.6	19	32.8	6	13.3	3	16.7	10	20.4
Management Accounting	6	5.1	7	12.1	1	2.2	0	0	0	0
Organisational Behaviour	32	27.1	22	37.9	25	55.6	10	55.6	21	42.9
Logistics & Operations M'tment	28	23.7	26	44.8	13	28.9	4	22.2	13	26.5
Personnel Management	27	22.9	18	31.0	30	66.7	8	44.4	11	22.4
Business Environment	0	0	0	0	0	0	0	0	0	0
Interpersonal Skills	11	9.3	4	6.9	10	22.2	6	33.3	6	12.2
<u>Subsidiary</u>										
Project Planning	16	13.6	9	15.5	2	4.4	1	5.6	13	26.5
Management Science	3	2.5	0	0	1	2.2	0	0	2	4.1
Technological Innovation	3	2.5	4	6.9	3	6.7	0	0	0	0
Industrial Relations	16	13.6	23	39.7	9	20.0	3	16.7	6	12.2
Marketing	10	8.5	0	0	6	13.3	1	5.6	4	8.2
Training	0	0	0	0	0	0	0	0	1	2.0
Contracts	1	0.8	0	0	1	2.2	0	0	0	0

TABLE 6.13 - TRAINING NEEDS

Subject	Aggregate (Major & Lieutenant Colonel)	
	Number	%
<u>Core</u>		
Information Technology	21	7.3
Quantitative Methods	3	1.0
Business Policy	2	0.7
Financial Management	22	7.6
Management Accounting	4	1.4
Organisational Behaviour	8	2.8
Logistics and Operations	26	9.0
Management		
Personnel Management	1	0.3
Business Environment	0	0
Interpersonal Skills	3	1.0
<u>Subsidiary</u>		
Project Planning	2	0.7
Management Science	1	0.3
Technological Innovation	1	0.3
Industrial Relations	5	1.7
Marketing	2	0.7
Training	1	0.3
Contracts	2	0.7

Section 4 - Future Training. Questions in this section were designed to obtain information on whether officers intended to undertake further management training and to gauge their views on the future of management education and training in the Corps.

a. Personal Plans. (Questions 46-49). Less than a third (32%) of respondents indicated that they had definite plans to undertake any further management training during the next two years. Of those who do plan to continue their studies, the majority were seeking additional civilian qualifications to enhance their future prospects.

b. Current Provision of Management Education and Training. (Question 50). Officers were asked to indicate whether RAOC is currently giving its officers sufficient opportunities for management education and training. (A clear distinction was made between education and training on the questionnaire). Opinions were fairly evenly balanced. 46% considered that there were insufficient opportunities for management training and 43% considered that there were insufficient opportunities for management education. These figures may be on the low side as the responses were from officers who have already received postgraduate management education, which may induce bias in the answers given.

c. The Making of Managers. (Question 51). Officers were asked to rate (not rank) the importance of various contributions to the development of a good manager. The responses were scored out of five giving the results shown in Table 6.14. The findings can be compared with those in the report of the Thomson Working Party Study (3), set up as part of the Constable/McCormick Study, which included a similar question. In both studies the first two factors are identical, but RAOC officers rate external management education more highly (as it ranked last in the Thomson Study). Again this may be the result of inherent bias because Army respondents have all received management education. Nevertheless, this is an important indicator of the importance which is attached to the benefits of management education.

TABLE 6.14 - CONTRIBUTION TO THE DEVELOPMENT OF GOOD MANAGERS

Factor	Average Score	Percentages				
		1	2	3	4	5
Inherent ability/personality	4.20	0	3	20	32	45
Job experience	3.96	1	7	18	42	32
External management education	3.60	3	11	31	32	23
In-service training	3.58	2	10	27	49	12
Initial vocational education	2.99	8	24	38	20	10
Initial non-vocational education	2.48	16	34	38	11	1

d. Management Education - Immediate Contribution or Investment? (Question 52). As the Thomson Working Party Study report states "A fundamental dilemma runs through management education. Some argue that it should give managers something they can use straight away. Others disagree, arguing that it is an investment for the future to do with broadening managers perspectives". This question was posed in the survey and officers were asked to express, as a percentage, the extent to which any programme of management education should be either an immediate contribution to job performance or an investment for the future. Overall there was a clear majority (61%) in favour of regarding management education as an investment. Dividing the sample into those who on the whole favoured an immediate contribution (rating that item at 60% or more), those who favoured an investment for the future (rating that item at 60% or more), and those who were comparatively indifferent between the two, it was found that 70% fell into the investment group, 17% fell into the immediate contribution group and 13% were neutral. This was also in line with the findings of the Thomson study, although RAOC officers were slightly more strongly in favour of regarding management education as an investment for the future.

e. Career Stage for Management Education. (Question 53). Officers were asked to indicate at what stage in his career an officer should attend an external management education programme. 56% favoured "Junior Major", 32% "Senior Captain" and 11% "Middle/Senior Major". None favoured "Lieutenant Colonel" and one officer specified that a progressive package was desirable.

f. Modular Programmes. (Question 54). The next question asked if it was considered desirable and feasible to combine some elements of in-service training and external courses as modules contributing to a formal programme of management education leading to a qualification, subject to suitable quality standards. 48% of the sample thought this was both desirable and feasible, 21% thought it was desirable but not feasible and 31% thought that it was not desirable. This type of approach to management education is now becoming available and there is clearly some support for further investigation of its relevance to RAOC.

g. Perceived Performance of External and Internal Management Training/Education. (Question 55). Using a question from the Thomson study, respondents were shown a list of 14 statements about the goals of management training/education and asked to

score each statement out of five. (Five if they thought external management training/education achieved this goal, one if they did not, and similarly for internal education/training). Respondents were also asked to rank the five most important attributes of the fourteen. The results of this question are shown in Table 6.15. In the main the results are as expected in so far as respondents distinguished between those things which external education/training does better than internal training/education. Overall officers scored external education/training as much more effective than internal training/education and this is in complete contrast to the findings of the Thomson study. The officers emphasis on external education/training is also borne out by the importance ranking. The top five items or factors correspond with the top five things which external education/training is considered best able to achieve. The importance rankings given by the Thomson study are shown in Table 6.15 for comparative purposes. Apart from the first item, "introducing new ideas into management", there is little correlation.

h. Content of Management Education Programme. (Question 56). Earlier questions referred obliquely to some of the contents of management programmes. The next question asked what proportion of a management education programme should be devoted to four basic areas. The result were as follows:

- (1) Knowledge of management theories, eg economic, - 24.5%
financial, behavioural, numerical theories.
- (2) Knowledge of the management environment, - 23.7%
eg economic, industrial, technical structures
and policies.
- (3) Specific management skills eg ability to - 29.0%
handle computers, production techniques, personnel
procedures and the like.
- (4) General management skills, especially of a - 22.8%
strategic nature.

The results indicate a need for all categories of input and little distinction can be made between knowledge - based inputs (the first two categories) and skills - based inputs (the last two categories). It does, however, support the view that postgraduate management education needs a more practical, skills element to be added to many programmes.

TABLE 6.15 - PERCEIVED PERFORMANCE OF MANAGEMENT TRAINING/EDUCATION

Item	External		Internal		Importance Rank	
	Average Score	Rank	Average Score	Rank	RAOC Study	Thomson Study
Introduce new ideas in management	4.16	4	2.6	8	1	1
Provide access to a range of ways of doing things rather than the specific way of an organisation.	4.45	1	2.05	13	2	8
Give an intellectual depth to the understanding of management issues	4.40	2	2.35	12	3	9
Instill the conceptual dimensions of management	4.34	3	2.59	9	4	6
Provide access to a peer group of managers in other contexts and organisations and thus provide learning through mutual interaction	4.09	5	1.91	14	5	11
Bring together in an integrated way the various dimensions of management	3.80	8	2.42	11	6	7
Teach immediately practical skills	2.58	9	3.95	2	7	5
Teach behavioural and organisational skills	3.86	6	2.72	7	8	4
Provide a substantial breadth of experience	3.81	7	2.45	10	9	13
Better instill skills specific to the organisation	2.16	13	4.32	1	10	3
Help provide a network of contacts relating to organisational activities	2.45	12	3.17	6	11	14
Link development more closely to immediate experiential needs	2.55	10	3.40	3	12	12
Provide a cohesive esprit de corps amongst managers within the organisation	1.85	14	3.33	4	13	10
Link development more closely to the various dimensions of the organisation	2.48	11	3.32	5	14	2

i. Type of External Management Education Programme Question 57).
Officers were asked to say how they thought the external element of a management education programme should be carried out. The overwhelming majority considered that full time study was preferable, although there was some support for modular programmes:

- (1) In an institution of higher education on a full time basis for say, one year. - 78.5%
- (2) An equivalent commitment in an institution of higher education on a part time basis over, say, a three year period. - 3.6%
- (3) An equivalent commitment on a modular basis with some full time attendance for limited periods of, say, 3 to 6 weeks. - 15.5%
- (4) An equivalent commitment by a distance learning programme. - 2.4%

6.4 COMMENTS OF RESPONDENTS

A number of officers took the opportunity to add comments on management education at the end of the various sections of the questionnaire. Several officers wrote separate letters and a great deal of informal discussion took place on many of the issues addressed in this study. Many officers hold very strong views and were very keen to be involved in the research and decision-making process. The most frequently recurring themes are highlighted in the following paragraphs. They fall into a number of categories: the benefits of management education, the content of that education, policy issues, and future options.

Benefits. Most officers emphasised the non-specific, intangible benefits of postgraduate management education and the large majority clearly enjoyed their year of study:

"The most formative experience of my RAOC career. I cannot over-emphasise the positive value of the course for my development as a person and as an officer".

"Much of the benefit is unquantifiable, however, I believe that it gave me a much more mature and objective view of management".

"Much of the benefit from the course I attended was indirect. That is the experience of working in the university, showing you how to study, how to research and generally by removing the military blinkers".

"One of the main benefits of an external management education programme is the ability to study away from a military environment and in the presence of civilian peers".

"The UMIST course was useful in that it supplied the theory for what in many cases is regarded as normal military practice".

"Management training outside of the military environment provides exposure to a wide range of skills and practices and broadens ones outlook. The skills improve performance and encourage lateral thinking".

"UMIST was largely viewed as a 'sabbatical year', taking the blinkers off military officers, in an academic environment".

The 'sabbatical' nature of the course did not mean that students had an easy time.

"It is to be expected that in order to earn a Masters degree in competition with academics, the person must work hard. Indeed many ex-students stated they worked harder than in most jobs".

"I derived a great deal of good from my year at UMIST. It was academically stretching, very rigorous and demanding. The standard was high and, although the content had little or no direct application, the personal development value is difficult to quantify, or overstate".

A number of officers questioned the relevance of the course:

"Whilst I enjoyed my year at UMIST and found it stimulating, it was of doubtful benefit to the Army as the subjects were too woolly and of little relevance to the Army/RAOC in the way they were structured".

"UMIST in general appeared to be divorced from the 'real world' that we in the military operate in".

"Both of the appointments which I have held since UMIST could have been (and commonly are) carried out without formal management training. The relevance to me of UMIST has, therefore, been marginal".

"Talking of my own experience, much of what I did at Manchester had no direct relevance to the RAOC or the Army, yet I gained an insight into civil practice and custom in much more than the pure management area from which I'm still benefiting today".

"I view the value of our expensive training as minimal except in so far as it creates a good impression".

Content. A number of officers expressed views about the content of the courses they attended:

"UMIST/Cranfield should be looked at in the greater context of officers education. Therefore it should not be specifically targeted in subject content".

"Whilst the particular course I attended was not particularly relevant directly to a military context, the flexibility of the university system appears to allow considerable choice of study".

"I discovered computers immediately on leaving the Army I think I should have discovered them about the time I went to UMIST".

"My statistics tutor was the worst I have ever met but even the limited knowledge he imparted has been useful!".

"We could do more in the area of financial/vote management procedures and techniques".

Several officers regretted that the content and structure of the courses the Corps uses are not more widely known and understood:

"It is a great pity that the broader educational aspects of this training is not more widely recognised".

"I am heartily sick of being told by the 'psc' stream that subjects such as marketing are irrelevant to the task of the RAOC. It only proves we have a great deal of internal as well as external education still to do".

There is a widespread view that the content of the CIT course is more directly relevant to the RAOC than much of what is available at UMIST:

"I suspect that the UMIST courses were if anything too conceptual for RAOC requirements and that Cranfield would offer better value". (UMIST graduate).

"My planning officer is Cranfield trained and is well qualified for his appointment in a depot". (UMIST graduate).

"I enjoyed, found useful and was impressed by the UMIST training. I suspect that the Cranfield training might be even better for RAOC students".

"The Cranfield course is tailored to the needs of the distribution industry of which we are a part. The benefits are, therefore, direct and applicable". (CIT graduate).

Policy. Many officers addressed a variety of what might loosely be termed policy issues in their comments. Some of these are highlighted below:

a. Availability of Management Education. In general officers were in favour of continuing and, if possible, expanding this form of training. They also considered that a continuous and progressive approach was desirable:

"It is the best thing the RAOC does for its officers. Any attempt to reduce the numbers selected to attend or to place the courses at RMCS should be resisted. RAOC will be the loser".

"I am very much in favour of continuing and perhaps expanding the external management education programme in the Corps".

"External management training should be extended to catch as many officers as possible".

"There is no progressive management education programme. The Corps needs to develop a programme of appropriate management training which over the course of an officer's career will produce a level of professional ability which is compatible with his rank and post".

"Management training should be a continuous development of the people and technical skills of the individual".

"Given current financial and manpower constraints I believe RAOC should be investing in more training of the officers rather than less. The better educated and trained the officer Corps the more efficient it will be and the fewer officers you need".

- b. Updating. Several officers pointed out that the passage of time erodes their knowledge and updating courses are required:

"After attendance on external courses regular updating should take place".

"I feel that there is a vital need for regular updating or else the investment in sending me to UMIST will soon be totally lost".

"The explosion in computer technology over the last 10 years means that much is now out of date".

- c. Staff Training. Many respondents considered that the Corps has put too much emphasis on staff training in recent years with often disastrous consequences:

"The 'real' talent should go to UMIST/Cranfield or some other institution, in preference to the Staff College, which produces second rate minds".

"Unlike staff training which narrows itself into the purely military field, management education provides a broad-based background for the RAOC officer, which can be applied to a greater or lesser extent in subsequent appointments".

- d. Qualifications. Almost without exception officers emphasised the need for qualifications:

"A formal management qualification is an important incentive to officers to undertake longer in-depth educational courses ...".

"A qualification is a must. We are supposed to be professionals".

"For most an acknowledged civilian comparable and recognised qualification is both the challenge and incentive".

"A formal, externally recognised qualification is not necessary, although an internally recognised one probably is".

e. Recruiting/Retention. Several officers mentioned the potential value in terms of the recruiting and retention of officers which can emanate from involvement with management education. Public relations benefits were also mentioned:

"The chance to undertake graduate training is one aspect that is not well advertised by RAOC which would be an incentive on recruitment".

"A management education programme could assist in meeting the aspirations of such (non-'psc') officers and assist in their continued retention within the organisation".

"There is also feedback to the academic institution which keeps the Army in the front line of management education and maintains a high profile link with academia and young managers".

f. Posting Policy. The area which attracted the greatest number of comments, and which is clearly creating a great deal of frustration and dissatisfaction amongst those who have received postgraduate management education, is the apparent disregard with which their qualifications and expertise are viewed, as they are not taken fully into account when they are posted to new appointments:

"..... better value would be obtained if those who received the education/training gained at external tertiary institutes were guided along a career path which capitalised on the investment, rather than being placed in jobs where the education was not a pre-requisite".

"Provided management education is relevant it is very worth-while It should be related to future or current employment otherwise it becomes lost".

"..... ideally linked to their next appointment which should be known in advance".

"The main RAOC weakness has in the past been a lack of strategy in planning, monitoring and using the skills effectively. To support this point of view I doubt whether PB9 (the Personnel Branch) have on record the main subjects studied by UMIST students".

"Having been given a considerable grounding in personnel management and industrial psychology I have not yet been asked to use them other than as peripheral aspects of my last two jobs".

"My training has never directly had any bearing on appointments".

"The only point I would raise is ensure postings from the course are relevant to the course attended".

"Of those selected for formal management education, few appear to be employed in the planning/depot management functions" (CIT graduate).

On the credit side, several officers indicated that their education had been of value in subsequent postings:

"The 10 month diploma course that I attended provided me with the opportunity to research, learn and practice management skills that have benefited me in every job I have undertaken since".

"The type of course I was fortunate enough to be allowed to take at UMIST has been useful to me in all my appointments since my course".

Future Options. Many officers made suggestions or recommendations which relate to the format, the content, the duration or the location of the management education undertaken by RAOC in the future:

a. Format. There were a number of comments about the relative merits of full-time and part-time courses and other types of delivery:

"Full-time rather than part-time study at least dedicates time. Conflict of priorities seldom allows honest allocation of time to studies. Studying in a group is often more rewarding and less frustrating than individual and isolated work".

"To attempt to dilute the training by part-time 3 year courses or programmed learning is not acceptable with all the other commitments an officer gets".

"I would not support any scheme based on correspondence or day release a course based 50% in a Service training situation and 50% in an outside agency would be OK".

"Management training tends to be sporadic and then in large chunks. I wonder if it would be useful to set up a distance learning package leading to a recognised professional qualification".

"I firmly believe that any full-time course should be a mix of in-house and external education".

b. Location. The majority of respondents favoured the use of external facilities for management education courses:

"The Army like all companies is very insular and womb-like in its protection of employees. Any training must be done outside this environment to give a balanced and objective view of the real world".

"It is felt that this education could only be provided in a university environment".

An expanded role for the School of Ordnance was suggested by some officers:

"Ideally, the future should be the evolvement of the School of Ordnance as an institution of higher education providing management education related directly to RAOC needs. The aim should be to gain recognition by outside professional bodies".

"With the level of academic achievement so far attained by the Corps in terms of those officers with management degrees etc it is astonishing that the School of Ordnance has not set up its own long management course with direct career and Corps relevance".

c. Duration. A number of respondents were in favour of shorter courses:

"I would like to see more of the shorter courses being used".

"If the Corps could find a suitable establishment, such as a Business School, where time means money to its students then this method of high profile, intensive teaching over a shorter period should be considered".

d. Course Content/Structure. Several officers expanded on earlier comments about the need for relevance and more control and direction over the studies pursued, although some of the comments are balanced by earlier ones which were opposed to the imposition of too many constraints:

"The course should be half broad concepts and half specifics".

"Students should be encouraged to participate in some core subjects".

"There is a very wide choice of options available at UMIST, many of which are very interesting but not always relevant to RAOC. A more structured package should be negotiated with the university and imposed on RAOC officers".

Miscellaneous. One officer, currently filling an exchange appointment in the USA, was able to give a comparative view:

"In the present environment in which I am working SNCOs have management degrees. All majors have an MSc in Business Administration or Logistics Management and a proportion of Senior Management have a PhD or equivalent. If I did not have an MSc I would not be able to make any contribution considered of any value".

One officer, who will remain anonymous, has a rather jaundiced view of the capabilities of his fellow officers:

"Quite honestly, a large number of officers, even when management trained could not organise a box of bricks".

Finally, researchers are always delighted to find they have made a positive contribution:

"I found the questionnaire very interesting and it gave me the opportunity to clarify in my own mind what I had believed for some time". (The officer did not expand further).

6.5 CONCLUSIONS

The survey, and concurrent discussions, provided much food for thought. This was the first occasion on which an independent evaluation of the courses to which the Corps has been sending its officers has been undertaken and many often conflicting and divergent views emerged. Nevertheless, an overall pattern can be discerned which must be taken into account when recommending future actions. In many ways the current situation is not entirely satisfactory and present arrangements do not appear to be meeting either organisational or individual goals.

Some of the reservations expressed about the relevance of the training stem from the subjects studied. In many cases, and this criticism is particularly valid in the case of UMIST, the choice of subjects is too narrow or specialist and officers have not been selected to fill appointments where their knowledge or skills can be applied. The research indicates that a generalist qualification - and the MBA degree is the most widespread of this genre - consisting of core subjects and a small number of electives or optional subjects would be preferable. Both the survey findings and the analysis of job content reported in Chapter 5 support this conclusion. There is, however, some strong support for the Cranfield course, with its emphasis on distribution management. This course is perceived as having greater relevance to much of the RAOC operation, although it does concentrate on the stores management side and contains many subjects of only peripheral interest.

There is a strong feeling that the Corps is not deriving maximum benefit from the courses because posting policies are not linked directly to the training being undertaken. In consequence frustration and dissatisfaction ensues because individuals are not invited to apply their specialist knowledge and skills. The research does indicate that officers who have received postgraduate management education are widely employable. The most suitable posts include planning appointments, RAOC staff appointments and sub-unit command. The managerial content of most jobs is high, although the precise managerial knowledge and skills vary widely.

The view that the Corps does not benefit fully from the investment in management education is supported by the analysis of research topics. The vast majority of these have no direct relevance to the Army or the Corps and indirect applications are often tenuous. Whilst acknowledging that academic credibility must be maintained and that the student's personal interest in his research topic is also important, there is some support for the view that current

military problems could be a focus for more of the studies which have to be undertaken as part of the course. At the moment personal interest is the over-riding factor in the selection of topics for research.

There was strong support for continuing to send officers on postgraduate management courses and many officers considered that this type of training should be more widely available to Corps officers. Many of those officers who attend Staff College would benefit from management education, possibly as an addition to staff training. There is a widespread view that management education is undervalued and misunderstood by those who have not received it. Formal academic qualifications are regarded as being of great importance, but again, their worth is not always acknowledged in military circles. If the Corps is to continue to send officers to postgraduate management education programmes it should be at Senior Captain or Junior Major rank. Priority should continue to be given to those who have passed their promotion examination and staff selection test but have not been selected to attend Staff College.

A number of respondents saw some of the emerging alternative approaches to management education as affording opportunities to make management education more widely available. However, the general consensus was that attendance on a full-time course remains the best option for most officers. The desirability of a progressive, structured and continuous process of training was emphasised by some officers and there was a widespread view that updating at suitable intervals is necessary if skills and knowledge are not to be eroded. Some pre-training is also necessary and the Middle Management Development Course at the School of Ordnance partly fulfils this requirement. Consideration could be given to introducing additional academic material, perhaps in a distance learning package. Finally, many of the findings of this study are comparable to those reported in other recent studies, including the Handy and Constable/McCormack Reports and the Peppercorn/Skoulding (4) Study which looked at many aspects of British industry (including management education) from the managers viewpoint. This gives a measure of confidence to the proposition that some of the prescriptions for change being introduced elsewhere are equally applicable and relevant to RAOC officers.

REFERENCES

- (1) P Forrester, "A Study of the Practical Use of the MBA", BIM, 1984.
- (2) "The Stoddard Working Party Report", ("The Making of British Managers"), BIM/CBI, 1987.
- (3) "The Thomson Working Party Report", ("The Making of British Managers"), BIM/CBI, 1987.
- (4) G Peppercorn & G Skoulding, "Profile of British Industry: The Manager's View", BIM/Ashridge/Cranfield, Dec 1987.

CHAPTER 7

THE PROVISION OF MANAGEMENT EDUCATION

7.1 INTRODUCTION

The postgraduate management education courses currently used by RAOC officers were described in Chapter 4. The survey of past students indicated that these courses are only partially satisfying the Corps' requirements. The UMIST MSc degree can be very narrowly based and is insufficiently generalised for the majority of Corps appointments. Similarly, whilst a strong case could be made for sending a small number of officers to Cranfield to study distribution management topics, this too is a specialised course and an officer's subsequent career needs careful handling if the benefits of the course are to be maximised. None of the seven officers who have graduated from CIT have been employed in a post which was directly related to their training. The MDA course at RMCS is in its infancy and only two RAOC officers have so far completed the course. As is the case with CIT graduates, it would appear that the MDA course equips officers for a comparatively narrow range of appointments.

If the current courses for which officers are nominated are not satisfactory, there is a need to identify alternative courses which can provide the education which RAOC officers require. In the last few years different forms of MBA programmes have proliferated in order to meet organizational and individual needs. This chapter will compare and contrast what is on offer. By relating the features and content of the various programmes to the management education needs of RAOC officers, it should be possible to identify institutions which have suitable courses. Course content is not the only criteria which has to be considered and a number of other factors will be taken into account before final recommendations emerge.

7.2 TYPES OF MBA DEGREE

The term MBA is now being used as shorthand for a postgraduate general management course leading to the award of a masters degree. It excludes masters degree programmes of a specialist nature, such as those in marketing, personnel management, accountancy and the like, for which an MSc degree is usually awarded. It also excludes research degrees such as MPhil, MLitt or PhD, even when the research is focused on management topics. Several institutions, however, continue to award an MSc, instead of an MBA, for what is essentially the same course of study.

Management schools describe the objectives of MBA courses in many different ways. A number of common themes or elements characterise most programmes. The first element covers the basic 'literacy' in the

underlying disciplines and functions of management. The second is aimed at providing an understanding of the totality of a business, its environment and its strategy. The third element is designed to improve personal skills. Many programmes also give an opportunity to study in depth one or more of the functional areas such as finance, production or human resource management. The majority utilise a combination of taught lessons and project work but the emphasis and the teaching methods can vary quite considerably. Most courses require students to carry out a major research study which culminates in the submission of a dissertation or thesis.

Gray and Pike (1) describe the five different types of MBA degree which are currently available. These are full-time, part-time, modular, distance learning and tailored courses, although modular, distance learning and tailored courses are to some extent part-time courses.

Full time MBA Courses. These can be of one year or two years duration. Full-time courses at London and Manchester Business Schools extend over two academic years, including the intervening summer vacation. Some of this time is spent working on projects in commerce or industry, either in teams or as individuals. Most university MBA courses, such as those offered at Bradford, Durham, Warwick and Cranfield, last for one academic year and there is much less time available for project work. The research project normally occupies the whole of the third term and the first two terms are devoted to the taught element of the course. Assessment is likely to be by a combination of course work and examination. Successful completion of the examinations will enable a student to proceed to the research phase of the course.

Part-time MBA Courses. These courses cover the same syllabus as a full-time course but invariably take between two and three years to complete. They require some obligatory attendance at the business school but this varies from one institution to another. Attendance requirements range from one evening or day per week during term, plus some weekends each term, to two evenings each week plus three weeks of full-time study each year. Most of this is done in the student's own time and many students sacrifice their annual leave in order to be able to attend the full-time elements of their courses.

Modular MBA Courses. This mode is not widely available at present but several business schools are seriously contemplating its introduction. It is essentially a 'sandwich' course with residential teaching modules of from three to six weeks interspersed with in-company projects, normally undertaken in the student's own workplace. The in-company assignments are an integral part of the course and their composition and format must be agreed between the academic staff of the university

and the sponsoring company. Henley, the Management College, is successfully operating this type of MBA course. This 'action learning' approach is also used by the International Management Centre from Buckingham (IMCB) and has been described in detail by Caie (2), a former student.

MBA by Distance Learning. Several colleges and universities are now offering an MBA degree by distance learning. These include Henley, Warwick and Strathclyde. The Strathclyde programme was introduced in 1983 and was the first of its type in the UK (3). The Henley course was introduced in 1985 and now has over 2000 students (4). These courses offer maximum flexibility to students and utilise a variety of sophisticated teaching methods including video and audio cassettes and computerised material. The majority also include close tutor supervision and the opportunity to use college facilities. Short residential modules sometimes form part of the course. The Open University's School of Management is also launching an MBA programme in 1989, which builds on the success of its existing Diploma courses.

Tailored MBA Courses. This type of course is a relatively recent development and has evolved from the need to make management education relevant to the needs of managers from specific companies or industries. It reflects the growing awareness that management education should be a partnership between industry and academia. It also reflects the changing financial policies in higher education and the need to substitute private funding for government funding. The most radical programme is the 'Consortium MBA' which has been developed by City University in conjunction with the Stock Exchange, J Sainsbury and American Express. Programmes are tailored to meet the individual needs of managers from these companies through a series of in-company assignments complemented by training courses matched to particular deficiencies. The emphasis is on practical performance and assessment involves both university staff and line managers. The scheme is the brain-child of Professor Hugh Murray (5) who is a strong advocate of the privatisation of Business Schools. Other collaborative courses which are already in existence include those at Warwick University (with BP, National Westminster Bank, Coopers and Lybrand, and the Metropolitan Police), Lancaster University (British Airways), Sheffield Polytechnic (Burton Group) and Oxford Polytechnic (WH Smith). Many of these courses are similar to 'Executive MBAs', which have become widespread in the USA (6), (7), and are now gaining a foothold in the UK (at Bath and Glasgow Universities, for example). 'Executive MBAs' are aimed at experienced managers and build on existing skills and knowledge. Unlike the tailored courses, which are company specific, managers from widely differing backgrounds may join an 'Executive MBA' programme.

Alternative Programmes. Many universities and colleges offer a variety of short postgraduate level management courses which are not usually qualification bearing. These may be open courses or tailored to meet company specific needs. Moves to make accreditation of this type of training feasible could increase the attractiveness of these programmes, as managers could build up a portfolio of minor qualifications, credit for which could contribute to the award of an MBA degree. There are a number of Diploma courses in existence including the DMS, the newly launched BIM Diploma (in conjunction with the Open Business School) and the revised Professional Education Scheme of the Institute of Personnel Management, due to be launched in September 1989. Many of the professional institutes are working together, under the auspices of the Consultative Committee of Professional Management Organisations (CCPMO), to develop joint syllabuses in certain managerial subjects. These would be validated by CNAA and could lead on to an MBA degree or to the specialist qualifications of the individual institute.

Each of the modes of MBA degree described above has strengths and weaknesses. The full-time MBA provides maximum exposure for the individual to a range of students with different business backgrounds and attitudes and ensures total immersion in an intensive learning environment. The student is, however, divorced from his normal working environment and there will be a period of re-adjustment when he returns to his former, or new, employment. The sponsoring organisation will, of course, have lost the services of the employee for the duration of the course. The part-time course has the advantage of the student continuing in-service throughout the course. This is beneficial to the organisation and may also assist the student who can immediately apply newly acquired knowledge and skills in a practical setting. Application of theory to practice should enhance learning by exercising all parts of the learning cycle. Part-time courses, however, can create individual pressures as the student must balance the sometimes conflicting priorities of the job and study. A great deal of commitment is necessary. These pressures are also to be found when studying by the distance learning route but there is slightly more flexibility in terms of when and where to study. Perhaps the modular MBA provides the best of both worlds. Periods of intensive learning and student contact are interspersed with in-service work experience. This can be advantageous to both student and employer. Students taking part-time courses now heavily outnumber the full-time students and this trend is certain to continue. The part-time course, spread over several years, is more compatible with the concept of continuous, 'life-long' management education and helps to prevent knowledge becoming outdated too quickly.

7.3 INSTITUTIONS OFFERING MBA DEGREES

There are a variety of institutions currently offering MBA, and MBA equivalent, degree courses. The London and Manchester Business Schools were set up, following the Franks Report, to make postgraduate management education available in the UK. Most universities have schools of management, or business schools, which offer full-time and/or part-time courses. Many of these are now well-established and enjoy international recognition. Several are closely linked with national and local business enterprises and make an important contribution to the success of these businesses in the market place. The main increase in the provision of MBA degree courses in recent years has come from the CNAA validated Polytechnic sector - but these are exclusively part-time degree courses. Finally, there is the private management college sector, which includes institutions such as Henley and Ashridge. This sector is independent of the university system but often cooperates closely with one or more universities for validation purposes. The private sector has also been at the forefront of initiatives such as distance learning, action-learning and modular MBA programmes. As it is funded by private money it must, inevitably, be more responsive to the needs of the market place.

Full-Time MBA Courses. The institutions offering full-time MBA courses in the UK are listed in Table 7.1.

Part Time MBA Courses. The institutions offering part-time MBA courses in the UK, including distance learning and action-learning modes, are listed in Table 7.2.

The selection criteria used by institutions vary enormously. The majority require at least an upper second class honours degree, relevant industrial experience and a GMAT score in excess of 500. Some universities stipulate a minimum number of years of business experience (usually in excess of three years) and some give added weight to factors such as 'self-funding' or 'sponsorship'. There is, however, considerable flexibility in the system and equivalent qualifications and sound experience can sometimes be accepted instead of a first degree. Interviews and assessment centre type tests form an important part of some selection procedures. Overall selection is very rigorous and the ratio of applicants to acceptances can be as high as 10:1.

As a result of analysing the student intake of a cross-section of institutions it is possible to draw a pen picture of the typical MBA student. The MBA course is normally seen as an opportunity to move onto the fast track. The average age is 26-29 years (in a range 21-40) with at least 3 years work experience. Many of the students have

TABLE 7.1 SUMMARY OF UK FULL-TIME MBA COURSES

Institution	Degree Offered	Duration of Course (Yrs)	Number of Students Admitted	Total Course Fee (£)(1)	Comments
Aston	MBA MSc MSc	1 1 1	66 19 8	1930 1930 1930	Personnel Management Public Sector Management
Bath	MBA	1	32	1680	
Birmingham	MBA	1	50	4000 (2)	Mainly Overseas Students
Bradford	MBA	1	144	1680	
City	MBA	1	140	2000	
Cranfield	MBA MSc MA	1 1 1	150 12 14	1680 1680 1680	
Durham	MBA/MSc	1	43	1800	
Edinburgh	MBA	1	50	Not Avail	
Henley/Brunel	MBA	2	51	3200	
Hull	MA MSc	1 1	15 10	1680 1680	Management Systems Management Science
Imperial College	MSc	1	90	1680	Management Sciences
Lancaster	MA	1	18	1700	Marketing
Leeds	MBA	1	36	Not Avail	
London Business School	MBA	2	2500	2200	

Institution	Degree Offered	Duration of Course (Yrs)	Number of Students Admitted	Total Course Fee (£)(1)	Comments
London Management Centre (Polytechnic of Central London)	MBA	1	60	1100	Various: Accounting & Finance Industrial Relations Public Policy & Administration Operational Research.
London School Of Economics	MSc	2	Not Avail	1680	
Manchester Business School	MBA	2	117	2200	
Sheffield	MBA	1	43	1680	Accounting & Finance Industrial Relations
Stirling	MBA	1	97	1700	
	MSc	1	25	1700	
Strathclyde	MBA	1	78	1730	Management Science (also Marketing, Organisational Psychology).
UMIST	MSc	1	40	Not Avail	
UWIST (Cardiff)	MBA	1	76	1680	
Warwick	MBA	1	100	1680	

Notes: (1) 1987-88 home student fees
(2) 1987-88 overseas student fees

Source: AMBAs Guide to Business Schools (7th edition)

TABLE 7.2 SUMMARY OF UK PART-TIME MBA COURSES

(a) University/private							
Institution	Degree Offered	Duration of Course (Yrs)		Mode	Number of Students Admitted	Total Course Fee (£)	Date Introduced
		Min	Max				
Aston	MBA	2	3	E or D	58	1290*	1978
Belfast (Queens)	MBA		3	E	46	866	1978
Bradford	MBA		3	E	43	2300	1982
City	MBA		3	E	143	4500	1978
Cranfield BS	MBA		3	D	55	3050	1981
Edinburgh	MBA		3	E	50	2250	1984
Glasgow	MBA		3	E & D	51	2190	1976
Henley (Brunel)	MBA	2	2½	D	55	2450	1979
Henley DL	MBA	2	9	-	600	3250	1984
Heriot-Watt	MBA	2		D	12	1730	1985
IMCB	MBA		1½	AL	-	6800	1983
London BS	MSc		3	D	62	5830	1983
Loughborough	MBA		3	E	32	976	1982
Manchester BS	MBA	3	4	D	39	4600	1981
UMIST	MSc	3	5	E & D	35	1190	1982
Newcastle	MBA		3	D	33	2250	1980
Salford	MA	2	5	E or D	-	700	-
Stirling DL	MBA	2½	4	-	30	7500	1988
Strathclyde	MBA		3	E	77	2040	1976
Strathclyde DL	MBA	3	4	-	121	2650	1983
Ulster	MBA		3	E or D	37	900	1980
UWIST	MBA		3	E & D	50	1800	1971
Warwick	MBA		3	E	51	5650	1986
Warwick DL	MBA	4	8	-	500	3800	1986
(b) Polytechnics							
Brighton	MBA		3	E	26	2400*	1986
Central London	MBA	2	3	E or D	-	1232*	1986
Hatfield	MBA		2	E or D	-	2600	1987
Huddersfield	MBA		3	E or D	-	900	1986
Kingston	MBA		2½	E	-	2556	1986
Leicester	MBA		3	D	-	1033	1986
Manchester	MSc		2	AL	-	1082*	1987
Middlesex	MBA		3	E	50	960*	1986
North-East London	MSc		2	AL	-	1300	-
Sheffield	MBA		3	E & D	-	672*	-
Thames	MBA		3	E	-	1800	1988

BS = business school

DL = distance learning

AL = Action Learning Course

D = day

E = evening

* = 1986 prices

Source: AMBAs Guide to Business Schools (7th Edition)

left their company and are self-supporting throughout the course. The average salary gain on taking up a post-MBA job is 1.7 (8) and most graduates receive salaries in excess of £30,000 (not including benefit equivalents) per annum. Most move into general management appointments, with small numbers going to functional specialisms such as finance, accounting and marketing. The MBA graduate is seen as 'main board' material and can expect to achieve senior company status within 10 years.

7.4 CRITERIA FOR SELECTION OF INSTITUTION

With such a variety of management schools offering postgraduate management education and utilising such a wide range of modes or methods, the selection of the most suitable institution (or institutions) requires careful consideration. The criteria to be used when selecting an MBA course to meet Corps and individual needs fall into a number of areas:

a. Syllabus. The core and subsidiary subjects required by RAOC officers were discussed in earlier chapters. The MBA courses selected must be capable of meeting the majority of these needs, although there may continue to be a requirement for a small number of officers to specialise in certain areas. The structure and content of specific courses will be evaluated in more detail later.

b. Faculty. The background, qualifications, expertise and experience of faculty is important. They must have had practical experience of their subjects and not be purely academics. The credibility of faculty is often reflected in the degree of cooperation which exists with the local business community and the consultation contracts which they attract. Large faculties can often offer a wider spectrum of expertise than very small departments. In 1984 the Times Higher Education Supplement published peer group assessments of the relative merits of business faculties according to quality of teaching and quality of research. The results are shown in Table 7.3. In 1986 the University Grants Committee (UGC), now the University Funding Council (UFC), categorised business schools as 'outstanding', 'above average' and 'below average'. The results which cover both undergraduate and graduate programmes are shown below:

TABLE 7.3 PEER GROUP REVIEW OF TEACHING AND RESEARCH 1984

TEACHING RANK

Ranking	No of Votes	
1	Bath	40
2	Warwick	37
3	Lancaster	25
4	Bradford	21
5	UMIST	16
6	City	16
7	Edinburgh	16
8	Loughborough	15
9	Manchester Business School	15
10	London Business School	13
11	Aston	11
12	Strathclyde	11
13	Cranfield	9
14	Kingston Polytechnic	8
15	Liverpool	7
16	Cardiff	7
17	Durham	6

Also mentioned: Kent, Thames Polytechnic, Swansea, Salford, Plymouth Polytechnic, Sheffield City Polytechnic, East Anglia (5): Trent Polytechnic, Ulster Polytechnic, Middlesex Polytechnic, UWIST, Leeds Polytechnic, Imperial College, Sheffield (4); Polytechnic of Central London, Coventry Polytechnic, Birmingham, Ealing College of Higher Education, Leicester Polytechnic, Stirling, Polytechnic of North London (3); Portsmouth Polytechnic, Bristol Polytechnic, City of London Polytechnic (2); and Brighton Polytechnic, London School of Economics, Humberside College of Higher Education (1).

RESEARCH RANK

Ranking	No of Votes	
1	London Business School	95
2	Manchester Business School	64
3	Warwick	43
4	Lancaster	41
5	UMIST	23
6	Bath	18
7	Aston	17
8	Cranfield	14
9	Bradford	13
10	Imperial College	11
11	Strathclyde	8
12	Loughborough	7
13	Birmingham	7
14	Edinburgh	6

Also mentioned: Ashridge, UWIST, Leeds Polytechnic (5); London School of Economics, Trent Polytechnic (4); Bristol, Ulster Polytechnic, Durham (3); Swansea, Oxford Management Centre, Middlesex Polytechnic (2); and Liverpool, Polytechnic of Central London, Southampton, Paisley College of Technology, Plymouth Polytechnic (1).

Source: Times Higher Educational Supplement.

(1) Outstanding. London Business School (Institute of Finance); UMIST; Warwick.

(2) Above Average. Aston (Work Organisation Research Centre); Bath; Bradford (Production Management, Managerial Economics); City, Kent; Lancaster (Operational Research, Behaviour in Organisations, Management Learning); Liverpool (Economics); London Business School (Centre for Economic Forecasting, Centre for Business Strategy); Loughborough (Institutional Management in HE, International Trade and Management Groups); Sheffield (Economics); Glasgow; Stirling (Business Studies); Strathclyde (Administration, Industrial Relations, Operational Research); Imperial College; London School of Economics.

(3) Below Average. Durham; Hull; Keele; Lancaster; Manchester Business School; Newcastle; Salford; Sheffield; Surrey; Edinburgh; Heriot-Watt; UWIST.

c. Teaching Methods. In addition to variations in the mode of MBA degree offered (eg full-time, part-time, distance learning etc), there is also considerable diversity in the combination of, or emphasis on, particular teaching methods. Some institutions favour the case study method, others use more traditional lectures and seminars. Project work is an important component of some courses. Methods of assessment also vary and the proportion of marks to be earned from course work, as opposed to examinations, can be as high as 100% or as low as 10%. Most institutions utilise a combination of course work and examinations.

d. Students. The Corps and the individual officer will gain most from an institution attracting a wide range of students in terms of their background, experience, business sector and current skills. The mix, both socially and intellectually, is one of the most potent forces in fostering the right atmosphere for educational success. A large student body is more likely to offer these features than a very small one.

e. Facilities. While not of overriding importance, the availability and quality of both academic and social facilities is relevant. The provision of libraries, computers and other study facilities does vary and can affect the quality of the education received. The geographic location of an institution, its

proximity to a military base (for married quarters and general administration), and the cultural and recreational facilities should not be overlooked.

f. Entry Criteria. Many officers do not have a first degree. They must, therefore, be regarded as mature students and the quality of their experience evaluated accordingly. Aptitude for higher management education can be demonstrated by satisfactory performance in GMAT. For these officers the entry criteria demanded by individual institutions are critical and they must be capable of gaining admission. Some institutions set very high entry criteria and are invariably oversubscribed. Others are less stringent and more flexible. It should be noted that the UMIST Senate was firmly convinced of the capabilities of RAOC students when they allowed the first officers to read for MSc degrees in 1979/80. In a paper submitted to Senate by academic staff of the Department of Management Science it was stated "The Department is convinced that the typical 35 year old Army major sent at the moment can more than hold his own in the company of more traditional postgraduate students. It is also felt strongly by those with whom the officers come into contact that they bring a particularly valuable maturity and set of experiences to the Department and to their fellow students which would be sorely missed if they were to disappear" (9). Similar arguments could probably be used with most institutions.

g. Cost. This is not an important factor in so far as the costs for postgraduate education are fairly standard throughout UK institutions. The private management colleges are, however, rather more expensive. Cost is also a factor when comparing the relative merits of full-time education with part-time alternatives. The capitulation costs of losing an officer for a full year have to be taken into account.

7.5 OPTIONS FOR RAOC

MBA degrees have been divided into two main categories - full-time courses and part-time courses - and these are in essence the options available to RAOC. Hitherto, only full-time courses have been used. The availability of supernumerary cover and the appropriate level of funding has not forced the Corps to consider the alternatives. In fact this approach has limited the number of officers who have been selected to attend UMIST, CIT and, more recently, RMCS each year. The officers selected have, however, been able to devote themselves to their studies without other distractions. As there is currently no external pressure

to change this practice, a continuation of full-time study remains a viable option. A review is necessary to determine which of the available programmes best suits the Corps and individual officers' needs.

The importance of continuous and progressive management education for all RAOC officers has been established, but this can only be achieved by extending current provision. One way in which this might be achieved is by introducing an element of part-time study. This has inherent limitations in so far as military duties may interfere with personal study. The principle of private study has been accepted in the Army and the Captain to Major promotion examination is now studied for by distance learning. In the case of postgraduate management education it will rarely be possible for officers to participate in evening or day-release schemes. Few military bases are sufficiently close to universities or polytechnics to make this practicable. The part-time option is, therefore, reduced to the distance learning or the modular MBA format. An evaluation of the courses operating in these modes is necessary to see if they might meet the needs of RAOC officers.

7.6 EVALUATION OF FULL-TIME COURSES

The institutions offering full-time MBA courses were listed in Table 7.1. A number of these can be eliminated because they do not offer suitable courses to meet RAOC requirements. The London and Manchester Business School courses are of two years duration and must, therefore, be discounted. Several other universities have very small postgraduate management schools and these are also considered to be unsuitable. The following establishments are deemed to be worthy of more thorough evaluation: Aston, Bradford, City, Cranfield, Durham, Polytechnic of Central London, Sheffield, Strathclyde, UMIST, Warwick and RMCS. Brief descriptions of the main features of each of these institutions are given below.

University of Aston Management Centre. Aston University has one of the largest business schools in Europe. It is situated in the country's second city, which offers a wide range of cultural and recreational facilities. The university facilities are good and the postgraduate activities are housed in a custom-designed centre opened in 1978. The university has a full-time faculty of 71, of whom 39 hold PhD degrees, and they are a mix of academics and practitioners. The MBA course is taught by both formal classes and participative exercises. Entrance requirements include GMAT 550 and business experience. The course is assessed by examination (60%), coursework (18%) and dissertation (22%).

University of Bradford, Management Centre. Bradford University has one of the largest MBA programmes and enjoys an international reputation. Bradford is a very cosmopolitan city and the management centre is well equipped. Some emphasis is placed on computers which are used extensively during the course. The business faculty has 52 full-time staff, of whom 32 have PhD degrees. The course has a number of foundation subjects and a wide range of electives. Assessment is mainly by examination at the end of the third term (90%). Coursework and dissertation account for the remaining 10%.

City University Business School. Situated at the Barbican Centre and Gresham College in the financial centre of London, City University is able to augment its teaching staff with senior managers and businessmen. It also allows the university to inject a practical element into its courses, particularly in the third term. There are 125 members of staff, of whom 23 hold PhD degrees. The MBA course has a core element but then splits into specialist areas including Business Finance, Industrial Relations and Marketing. The university is currently introducing its innovative 'Consortium MBA'.

Cranfield School of Management, Cranfield Institute of Technology. Cranfield is one of the most prestigious schools of management and it concentrates mainly on postgraduate studies. The school occupies purpose built facilities which were completed in 1977. Cranfield is one of the more difficult institutions to which to gain admission and it tends to attract more mature and experienced students. There are 54 staff (including 16 professors), of whom 18 have PhD degrees. Assessment of this very intensive course is 100% course work. It should be noted that there are few links between the School of Management and the Distribution Studies Unit with which the Corps has an established relationship.

Durham University Business School. Durham University is unique in offering both an MBA and an MSc degree. The courses have a common core element but slightly different electives. The business school is well established and now occupies purpose built facilities. It is a small faculty with just 20 full-time staff and, in consequence, caters for a comparatively small number of students. Entry requirements are fairly stringent and assessment is by examination and coursework.

London Management Centre, Polytechnic of Central London (PCL). PCL is currently the only polytechnic offering a full-time MBA course. Situated in NW London, the polytechnic has sound facilities. It has a small staff of 36, of whom 3 have PhD degrees. Entry regulations are

normal but there is flexibility to accept candidates with non-standard qualifications. The course is assessed by examination (27%) and coursework (73%) which includes a major project.

University of Sheffield, School of Management and Economic Studies.

The university has an attractive campus situated in one of the more pleasant parts of the city. The MBA is a broad-based, taught course followed by a research project. Assessment is based on examination and coursework. There are 37 staff, of whom 9 have PhD degrees.

University of Strathclyde, Strathclyde Business School. Strathclyde, a modern university located in the centre of Glasgow, is in many respects the focal point for the Scottish Business School, which comprises the business related departments of Edinburgh, Glasgow and Strathclyde Universities. It has a very large faculty, some 200 strong, and a substantial number of students, although these are split between several modes (including a distance learning MBA). The course consists of core subjects and electives, and is assessed by examination (70%) and coursework (30%).

University of Manchester Institute of Science and Technology (UMIST) School of Management. UMIST has probably the oldest and largest management department in the country, and the Corps has enjoyed a long relationship with UMIST. The standard postgraduate management education course is an MSc in Management Science, Organisational Psychology or Marketing. These are specialist courses and provide a fairly narrow perspective. Having recently been renamed the School of Management, it is now planned to introduce a more generalist course leading to an MBA. The school has 55 full-time staff, of whom 33 hold a PhD degree. Situated in a strong industrial area the school has a very good reputation for collaborative projects and consultancy work and most of the staff are practitioners as well as academics.

University of Warwick, School of Industrial and Business Studies.

Warwick has a thriving and expanding management school and is developing a good reputation for quality and innovation. It is particularly keen to develop links with business and industry and staff are actively involved in a wide range of external projects. There are currently 52 staff, of whom 30 have a PhD degree. Entrance criteria include relevant industrial experience and 'self motivation'. Course content can be tailored to suit individual requirements and there is also a distance learning MBA. Assessment is by examination (70%) and coursework (30%).

Royal Military College of Science (RMCS), Shrivenham. The recently launched MDA degree was described in Chapter 4. It concerns itself with the "unique problem of management in the defence sector". There is an emphasis on "management skills in design, production, procurement and management of defence resources". As Surtees (10) observes, "This is less likely to broaden perceptions of the defence business in the wider context". The tutors are essentially RMCS academic staff with a background in defence matters. They are supported by visiting speakers, some of whom deal with specific aspects of defence management. Students, who are few in number, are exclusively defence orientated being drawn from serving officers, defence contractors and Civil Servants.

Comparative Analysis. Each of the above establishments would to some degree be capable of meeting some or all of the management education needs of RAOC officers. Clearly some would be more suitable than others and in order to differentiate between what is available at each institution a comparative analysis has been carried out. In order to reduce, but not eliminate, subjective bias in this analysis a numerical decision-making instrument has been used. Kepner and Tregoe (11) have described a criteria-referenced, systematic process of decision analysis which is applicable to this type of evaluation. It is based on comparing a number of options against an ideal specification. The criteria to be used in this particular exercise are based on those described earlier, but weighted to reflect those which are considered to be most important. The criteria used are as follows:

- a. Syllabus. To be relevant to RAOC and to comprise core and elective subjects. A project is to be an integral part of the course. Weight: 8.
- b. Faculty. Experienced, well-qualified staff with a balance of academic and practitioner skills. Some evidence of current consulting and research activity. Weight: 5.
- c. Facilities. Good teaching support facilities. Geographic location attractive and near military base. Weight: 3.
- d. Students. Age, mix and experience of students likely to be of benefit to RAOC students. Weight: 3.
- e. Teaching Methods. Variety and flexibility with access to modern media including computers. Assessment by examination and course work. Weight: 3.

f. Entry Criteria. Flexibility required to cater for non-standard qualifications of some RAOC officers. Weight: 2.

g. Cost. Only a factor where this is in excess of standard charges for postgraduate students. Weight: 1.

Table 7.4 shows the results of applying these weighted criteria to each of the institutions listed. It must be emphasised that this is not an education ranking list in absolute terms, but rather an assessment of the appropriateness of each establishment to RAOC requirements. It will be seen that there are clear leaders in Cranfield and Warwick. Strathclyde, Bradford, Durham and UMIST are closely grouped some way behind. It should be noted that in the case of UMIST the analysis is based on the current syllabus which, as has been pointed out, is rather narrow and specialist. The introduction of a traditional MBA degree should, once it is established, greatly enhance the relative standing of that institution. The findings of this analysis should only be regarded as a rough guide and should be further refined by direct contact with the establishments concerned. They may be able to tailor elements of their course to the specific needs of the Corps. The MSc in Distribution Technology and Management at Cranfield has not been included in this analysis. It is a specialist degree and officers who attend the course should be regarded as specialists, not generalists, and this should be reflected in their subsequent appointments. Finally, the MDA degree at RMCS is quite clearly still under development and is suffering teething problems. It only partially satisfies the Corps needs and is not a strong contender for the type of course which is required. It may be modified in due course and may become an established qualification. Judgement should be reserved until such time as it is fully evolved. A simplified comparative analysis was carried out in a recent Economist publication titled "MBA: The Best Business Tool?" (12). This analysis was based on just three factors: reputation, price and innovativeness. It is interesting to note that Warwick, Cranfield and Henley were highly rated.

7.7 EVALUATION OF PART-TIME COURSES

So far it has been assumed that the Corps will continue to use only full-time courses. This is probably the preferred option, but the alternatives should not be dismissed without more consideration. As we have seen there are a variety of part-time courses on offer.

Evening and Day Release Courses. As previously discussed, these will only occasionally be suitable for RAOC officers. Most take three years to complete, and this does not always coincide with an officer's tour of duty in a particular station. The officer also needs to be quite

TABLE 7.4 COMPARATIVE ANALYSIS OF INSTITUTIONS

University/ College	Rank	(8) Syllabus		(5) Faculty		(3) Facilities		(3) Students		(3) Teaching		(2) Entry		(1) Cost		Total	%
		R	W	R	W	R	W	R	W	R	W	R	W	R	W		
Ashton	8	6	48	6	30	7	21	7	21	7	21	8	16	10	10	167	67
Bradford	4 =	8	64	7	35	6	18	7	21	8	24	6	12	10	10	184	74
City	9	6	48	6	30	6	18	6	18	7	21	8	16	8	8	159	64
Cranfield	1	9	72	8	40	8	24	8	24	8	24	5	10	10	10	204	82
Durham	4 =	8	64	7	35	7	21	6	18	8	24	6	12	10	10	184	74
PCL	10	6	48	5	25	5	15	5	15	7	21	9	18	10	10	152	61
Sheffield	7	7	56	6	30	6	18	6	18	7	21	8	16	10	10	169	68
Strathclyde	3	8	64	7	35	7	21	7	21	7	21	7	14	10	10	186	75
UMIST	6	5	40	8	40	8	24	8	24	8	24	8	16	10	10	178	71
Warwick	2	9	72	8	40	7	21	7	21	8	24	7	14	10	10	202	81
RMCS	11	5	40	5	25	6	18	5	15	6	18	8	16	10	10	142	57

Notes:

R = Raw Score

W = Weighted Score

close to the educational establishment with which he is registered and not all RAOC installations are sufficiently close to suitable universities or polytechnics. Notwithstanding these reservations, a number of well-motivated Corps officers have used this route to academic qualifications and many more would probably do so given appropriate financial support and the encouragement of their superior officers. As the Corps would undoubtedly benefit from having educated, well-qualified officers who had gained these qualifications whilst still doing their normal job of work, consideration should be given to funding individual applicants who want to improve themselves. Self-development of this type is the norm for most civilians and the Army would benefit from creating a similar ethos of self-development - rather than automatically preferring to send personnel on a residential course, when their services are lost for the duration of the course. This type of evening or day release course should be available on an opportunity basis for officers who can satisfy the entry criteria and are prepared to make the necessary commitment. As far as possible officers opting for this route to qualifications should be fully funded.

Modular Courses. This type of MBA course is probably even more appropriate for many RAOC officers. Short residential periods are interspersed with much longer periods spent filling a normal appointment. There are several degree courses of this type available but at present they are confined to the private management colleges. They are, therefore, more expensive than equivalent full-time courses but officers would not be lost to the system for the duration of the course. The principal courses available are described below:

- a. Henley, The Management College. The Henley modular MBA, which is validated by Brunel University, is well established and widely respected. At present there are four modules, an optional outward bound course and a dissertation project. The course lasts for two years and the majority of students are sponsored by their organisations. The residential modules at Henley are interspersed with in-company assignments. Module 1 (of 8 weeks duration) is a foundation course covering the normal core subjects. Module 2 (6 weeks) builds on the foundation skills with practical group and individual activities. Module 3 (7 weeks) and Module 4 (6 weeks) are devoted to in-depth study of selected specialist areas. Private discussions with faculty indicate that this structure will be modified in 1989 to reduce the residential modules to three, the first two of which will be of 6 weeks duration and the third of 4 weeks duration. The foundation course will be taught using distance learning study packs but in-service assignments and projects will be unchanged.

b. Ashridge Management College. Ashridge have just launched an MBA degree programme in conjunction with City University, who will validate the course. The course consists of 3 modules at Ashridge interspersed with in-company projects, which culminate in the preparation of a dissertation. The 3 modules at Ashridge are of 6 weeks, 4 weeks and 4 weeks duration. Core subjects are studied under several main themes including Core Business Disciplines and Managerial Functions, Strategic Management and Business Policy, Human Resource Management for Improved Performance, and Project Management. The total cost of the course, which lasts for eighteen months, is £16,500 (+ VAT).

c. The International Management Centre from Buckingham (IMCB). The MBA programme offered by IMCB is mainly in-company and there is only a two week start up residential course at the beginning of the eighteen months required for completion. There are, however, a number of evening sessions and six residential weekends. Evening sessions are devoted to the five core courses in Human Resource Management, Marketing Management, Operations Management, Financial Management, and Strategic Management. The course is described as an 'Action-Learning MBA' and builds on the management education concepts of Revans (13) and others. The in-service projects are demanding and carefully structured and much of the course assessment is related to these projects. The majority of students are sponsored by their parent organizations and IMCB has tailored some of their material to meet the individual needs of companies such as Distillers.

Of the modular MBA courses currently available, the one at Henley has most to offer. It is a well-established course and the College has excellent facilities. A number of RAOC officers have attended short courses at Henley and there is a long standing link with the Corps. By nominating selected officers to undertake the modular MBA course the Corps could extend the provision of this type of training without affecting the supernumerary cover. It would also be possible to include more senior officers, at perhaps Lieutenant Colonel rank, on this type of course.

Distance Learning MBA. Four institutions are currently offering a distance learning MBA degree. These are: Henley, The Management College, Strathclyde Business School, Warwick University School of Industrial and Business Studies (in conjunction with Wolsey Hall, Oxford) and the Open Business School.

a. Henley. Henley is widely recognised as one of the leading distance learning establishments and has been offering an MBA by this mode for several years.

b. Strathclyde Business School. In 1983 Strathclyde was the first university to offer a distance learning MBA. The course structure is identical to that of the full-time and part-time MBAs and covers the same foundation and elective subjects. A project concludes the course which, in the distance learning mode, can take up to five years to complete. There are mandatory weekend residential schools, full tutor support and some optional study groups, so the student is not working in isolation. Students without the necessary educational qualifications can register in the first instance for a Diploma and transfer to the MBA subject to acceptable performance.

c. Warwick University. Warwick is a dynamic and innovative university and is now offering an external MBA through distance learning. Four years is the norm for completing the course. In Year One students study accounting and finance, quantitative methods, marketing I, and human resources management I. In Year Two they study financial management, marketing II, operations management, and information systems and computers. Year Three is devoted to business policy and three optional courses. A project is undertaken in Year Four. The total cost of the course is £2,950 (at 1986/87 prices).

d. Open Business School. The Open Business School Diploma has now been extended to an MBA degree which is being launched in 1989. Entry will be by one of two routes. Those who have already obtained the Diploma or who hold acceptable professional qualifications will proceed to a Strategic Management course and further optional courses before completing a dissertation. Those without qualifications will have to complete the appropriate credits for the Professional Diploma in Management before taking the additional courses. Fees are set at a reasonable level but it is anticipated that most students will be sponsored by their parent organisation.

Any study by distance learning requires a great deal of commitment by the student. It also extends the course of study over a protracted period and may not, therefore, be appropriate for military personnel who are mobile and can expect to be posted every two or three years. Nevertheless, it does provide an additional opportunity to extend the provision of postgraduate management education. Provided the courses

can be fully funded they could be worth introducing for some officers. All of the courses outlined above would be acceptable, but the Henley or Warwick University courses may be the most suitable.

Conclusions. There are clearly a number of both full-time and part-time courses which would be suitable for RAOC officers and which might be more appropriate than those which are currently used. In the long term a combination of full-time and part-time courses, using a variety of methods of delivery, is likely to be more successful than slavish adherence to any one type of course. A number of new initiatives in management education are being developed and some of these may be relevant to the Corps needs. If the Corps is to remain at the forefront of management education and training it must continue to monitor what is happening elsewhere and be prepared to take full advantage of new opportunities.

REFERENCES

- (1) C Gray & R H Pike, "Part-time MBA Programmes", in AMBAs "Guide to Business Schools", Pitman, 1988.
- (2) B Caie, "Learning in Style - Reflections on an Action Learning MBA Programme", Journal of Management Development, Vol 6 No 2, 1987.
- (3) G Anderson, "Developing a Distance Learning Route to the MBA: the Strathclyde Experience", Business Education, Vol 8 No 2, 1987.
- (4) D W Birchall, "Distance Learning in Management Education: A Case Example", Journal of European Industrial Training, Vol 10, No 6, 1986.
- (5) H Murray, "Management Education and the MBA - It's Time for a Rethink", paper presented at CRAC Conference, Cambridge University, Sep 1986.
- (6) G S Odiorne, "The Executive MBA: A New Way to Develop Talent", Personnel, Nov 1985.
- (7) L J Phillips - Madson & P R Sloan, "Managerial Development in the US: A Survey of the Executive MBA", Journal of General Management, Vol 13, No 3, Spring 1988.
- (8) P G Forrester, "The British MBA", Cranfield Press, 1986.
- (9) "Document in Support of the case for affording RAOC officers the status of being graduate equivalent for the purpose of enabling them to secure an MSc in a 'normal' period of registration", UMIST, private paper, 1979.
- (10) G Surtees, "The Making of Defence Managers", Civilian Management (Training) MOD, Apr 1988.
- (11) C H Kepner & B B Tregoe, "The New Rational Manager", John Martin Publishing Ltd, 1981.

- (12) "MBA: The Best Business Tool?" Economist Publications, Special Report No 1154, Nov 1988.
- (13) R W Revans, "Action Learning", Blond, 1980.

PART THREE

CONCLUSIONS AND RECOMMENDATIONS

CHAPTER 8

THE WAY FORWARD

8.1 INTRODUCTION

This study was prompted by an awareness of the many changes in both military and civilian life which are likely to affect the organisation and operation of RAOC in future years and the vital role which training is likely to have in ensuring that the Corps can continue to maintain its current high standards of performance. Technological change, the impact of information technology, economic and social factors are all having a major influence on society. Within the Army these changes are reflected in new and more advanced equipment, but reduced manpower, increased financial constraints and greater accountability. The introduction of the New Management Strategy for the Ministry of Defence, and the QMG's Corporate Plan, are two examples of the way in which the search for economies is being pursued. In this changing environment it is inevitable that even well established traditions and operational procedures are being called into question. In this context, training methods are one of the first areas to come under scrutiny.

The study set out to evaluate current management training for RAOC officers in order to determine the extent to which individual and organisational objectives are being satisfied. In the event that objectives are not being fulfilled, the study also sought to propose any changes to current training which might be needed in order to rectify the shortcomings. Although the main focus for the study was higher management education, and in particular the postgraduate courses to which the Corps has traditionally sent selected officers, this could not be researched in isolation. A great deal of management training is carried out in other ways in a variety of military, as well as civilian, settings. Postgraduate management education has, therefore, been looked at in the context of the overall structure of the management training which is available to RAOC officers.

This chapter draws together the main findings of the research which has been carried out and then goes on to signpost the way forward. Some detailed proposals for change are described. These build on the strengths which have been identified, but also attempt to rectify the main weaknesses in the current provision of training. The changes which are being experienced in many facets of service life indicate a need for both short and longer term action. Similarly, some of the proposals for modifications to current management training can be implemented immediately, while some will require more time, and additional resources, if they are to be successful.

8.2 SUMMARY OF MAIN FINDINGS

The study began with a review of the literature of management education and training, with particular emphasis on some of the recent research into the subject. The lack of satisfactory data on the evaluation of what has been on offer from business schools was highlighted, although there are indications that more positive steps are being taken to establish the type of courses which are needed by industry and its managers. The Handy (1) and Constable/McCormick (2) Reports and the Government restructuring of higher education have been important catalysts.

Chapter 3 set the scene for the remainder of the study by examining the need for management education and training. This was tackled in a conceptual or theoretical way with arguments underpinned by the work of experts in the field and liberal reference to their research and writings.

In the case of management training the justification stems from a combination of both organisational and individual pressures. The organisation is concerned to achieve an adequate supply of suitably trained personnel to ensure the continuity and growth of the organisation in a constantly changing environment. Individuals, on the other hand, will also be concerned with current performance, job satisfaction, future prospects for advancement and the like. Ideally there will be no conflict between the objectives of both the organisation and the individual, although in the Services individual aspirations must sometimes be sacrificed for expediency or "the exigencies of the Service".

The problems of diagnosing both organisational and individual training needs were discussed. At the organisational level clear corporate objectives are essential and a system of performance monitoring to identify shortcomings will allow corrective action to be taken. The assessment of individual training needs is, perhaps, even more complex. The way in which people acquire knowledge, attitudes and skills varies enormously and the requirement for a specific combination of these attributes is constantly changing as individuals progress through the organisation. Technical, human and conceptual skills will be required in differing proportions at different levels in the organisation.

A model of General Managerial Competency was introduced to assist in the identification of individual training needs. This model concentrates on the wide variety of personal and interpersonal skills which are required by the competent general manager or officer. In addition to these skills there is also likely to be a requirement for

the technical or specialist skills relevant to a particular appointment. The acquisition of appropriate skills can be achieved in a variety of ways. Attending a course is but one option and there are many 'on-the-job' management development methods. Management trainers are fortunate in having an extensive battery of training methods currently available, and some new developments are also making an impact. These include open and distance learning and computer-based learning. The implications of experiential learning theory for management development methods were discussed with reference to the work of Kolb (3) and others.

The justification for the continuation, and possible expansion, of management education for RAOC officers was also discussed in Chapter 3. This justification was based on both organisational and individual needs. The recruiting and retention of officers is equally as important as the continued maintenance of the highest standards of performance by the Corps. The need for a continuous and progressive training structure was stressed, but with particular reference to the practical nature of the subject. Thus an analysis of management development must focus on the desired managerial results rather than the knowledge or skills required for managerial activity. The emphasis must be on outcomes, or output, rather than input. This competency based approach to management development was examined in more detail in a later chapter.

The Corps expends a great deal of time and money on training and a significant proportion of this is devoted to management training. Chapter 4 described the principal management training and education courses which RAOC officers may attend. In the case of management training, a distinction was made between general management training and technical, or specialist, management training. The former is likely to be required for virtually every appointment held by an officer, while the latter is much more job specific and may only be applicable in a minority of appointments. In the case of management education courses, description was confined to an outline of the courses studied by officers selected to receive postgraduate training at UMIST, Cranfield and RMCS.

The responsibility for determining training policy rests with the RAOC Officers' Careers Committee and is laid down in DGOS Training Instruction No 2 - Officers Training. The policy is carried out by a number of agencies and one of the areas which requires attention is the link between training and posting policy. Although training policy stipulates that training should be progressive and continuous, much of the management training which is provided is confined to the Middle Management Development (MMD) course which prefaces the Ordnance

Officers (00s) course, the 00s course itself and a small number of technical courses, such as the Officers' Primary Provision course. It is, however, acknowledged that most officers are selected for a long functional course and that the majority also attend the Junior Command and Staff Course. Approximately 50% of all RAOC officers are selected to attend the Army Staff Course (ASC), at Camberley, or a postgraduate management course. Officers not selected for either of these courses may not receive any formal management training after the 00s course and this is likely to be attended before the age of 25 years. This is clearly an unsatisfactory situation and remedial action is needed. There is also a shortage of training for senior officers (ie. Lieutenant Colonel and above) who will frequently require updating to equip them for their new responsibilities. Fortunately management development does not rely exclusively on course-based training and most officers acquire substantial expertise through on-the-job or experiential learning. Nevertheless, it is apparent that the stated objective of progressive and continuous management training for all officers is not being achieved at present.

The second major deficiency which must be addressed is the shortage of technical management training. Provision, inventory control, warehouse methods and the like are the fundamental skills of resource or logistics management and the 'bread and butter' tasks of most RAOC officers at several stages in their careers. Again, with few exceptions, the majority of officers do not receive any formal training in these subjects beyond the overview provided by the 00s course. Expertise in these basic RAOC technical functions is vitally important when resources are scarce, because those which are available must be optimised. Modern storage methods and the growth of information technology require better trained officers and this will almost certainly lead to a greater degree of specialisation than has previously been the case. To some extent this is already happening in the ammunition, POL and IT functional areas. Career patterns will have to change to accommodate this trend and the generalist RAOC officer may become far less common. A move towards longer or extended tours seems to be inevitable, especially for Corps appointments. Some proposals for enhancing technical management training will be put forward in more detail later.

Chapter 5 went on to examine the training needs of RAOC officers in more detail in order to identify the shortcomings in the current training more precisely. A survey of senior RAOC officers was conducted to help determine the training needs of officers at different stages in their careers. The survey found that there are different requirements as an officer progresses through the rank structure and that the main training effort should be concentrated at the

Captain/Major level. Senior officers have many, but disparate, training needs and many of these are relevant to a small number of specific appointments. This rather precludes the introduction of courses aimed at the majority of senior officers. Junior officers needs, on the other hand, are much fewer and training should be concentrated in the personal and interpersonal skills areas. It was useful to note that many of the findings of the survey were found to be comparable with recent studies undertaken elsewhere.

Contemporary work on management competencies was described with special reference to the training needs of RAOC officers, which were identified in the survey. These competencies were then related to the course content of a cross-section of MBA degree courses. The majority of these consist of a number of 'core' and 'optional', or elective, subjects. A taxonomy of core and elective subjects which might be relevant to the needs of RAOC officers was compiled. The job descriptions and job specifications of 287 Major and Lieutenant Colonel appointments were analysed to confirm the relevance of the core and subsidiary subjects which had been identified earlier. It was concluded that higher management education for RAOC officers should be generalist in nature and selected courses should offer a substantial number of core subjects and a small number of electives. The MBA degree would appear to be the most appropriate qualification for RAOC officers.

Chapter 6 records the findings of a survey of those officers who have received postgraduate management education in the period from 1974/75 to the present. The findings were discussed in detail at the end of the chapter and only the main conclusions are highlighted in this summary. The majority of the findings of the survey were conclusive, although some differences of opinion did emerge. The benefits of this type of training were widely recognised, both from the individual recipients point of view and from the Corps' point of view. Many of the benefits were intangible and management education should be regarded as a long term investment for both the Corps and the individual. Qualifications are important and ideally should be universally recognised civilian qualifications.

The relevance of some of the training was questioned. Many officers claimed not to have utilised their knowledge and skills in subsequent postings. This was especially true in the case of officers who have studied in fairly narrow, specialist areas. It was concluded that a more generalist course would alleviate this situation but that more effort should also be made to post officers to appointments where they could apply their knowledge and skills. Some officers reported frustration and dissatisfaction at not finding suitable outlets for their expertise.

Research topics were rarely of direct, or even indirect, relevance to the Corps. The Corps may be losing an opportunity to utilise many man-hours of research into problem areas which need investigation and resolution. Views on the future of management education were more varied. The vast majority emphasised the need to continue training officers in this way and many considered it was desirable to make management education more widely available. Although there was a natural preference for full-time study, many were in favour of at least considering alternative methods of provision. The optimum stage in an officer's career for this type of training was considered to be senior Captain or junior Major. Management education should, however, be continuous and progressive and there is a need for frequent updating or skills and knowledge will atrophy.

Chapter 7 looked in detail at the management education which is currently available or which is being introduced in the immediate future, with particular reference to MBA degrees. There are two main types of courses: full-time and part-time. Part-time courses can be further divided by the mode of delivery, which includes day release or evening courses, modular courses, distance learning courses, and tailored courses. The latter normally include some in-company activity. The strengths and weaknesses of each mode were discussed. Full-time courses allow the student to devote himself to his studies but his organisation must accept that he is not available for normal employment. Part-time courses make the student available for normal employment but may impose time and other pressures on the individual. A full-time course normally lasts for one academic year but part-time courses take up to five years to complete.

Full-time courses were compared and evaluated. An initial analysis identified 11 institutions which might provide suitable courses. These were then ranked according to criteria which included relevance of syllabus, quality of faculty, facilities, mix of students and entry criteria. Cranfield and Warwick emerged as favoured establishments but several others, including Strathclyde, Bradford, Durham and UMIST, were not far behind. Changes to the UMIST course are likely to elevate it still further.

Day-release or evening courses are unlikely to be suitable for most RAOC officers. Modular MBAs offer a better part-time option, as short residential courses are interspersed with in-service assignments. Henley, Ashridge and IMCB offer this type of course. Distance learning, with good support facilities, is becoming a more widely acceptable delivery system. Henley, Strathclyde, Warwick and the Open Business School are the leaders in this field. Tailored courses are also becoming more commonplace and many companies have forged links

with particular institutions to design courses which meet their specific requirements. Some in-company training may earn credits towards the final qualification. There is likely to be an increase in this type of provision in the future. Several other initiatives, including a two stage qualification, are being planned for the future and the Corps must continue to monitor these developments.

8.3 FUTURE POLICY

The RAOC Officers' Careers Committee is the focal point for decision-making in respect of RAOC officers' training policy, including management training. This policy is laid down in DGOS Training Instruction No 2 - Officers' Training. This is a very general document and has little to say on the subject of management training, other than setting out the objectives of, and the selection criteria for, UMIST and CIT courses. This is clearly unsatisfactory and DGOS Training Instruction No 2 must be revised to include details of other management training which should be undertaken.

Implementation of officer training policy is the responsibility of a number of agencies, including HQ DGOS and the personnel branch (PB9). The link between posting policy, training policy and career planning is self-evident, but this needs to be emphasised in a number of ways. PB9 must assume greater responsibility for ensuring that specific qualifications or training needs are identified in job specifications and that posting orders show which courses are required for each appointment. This is only done in a minority of cases at present - largely because training needs have not been specified by the units to which officers are to be posted. Training in the drafting of job specifications may be required in some cases. In many instances commanding officers appear to be reluctant to release officers for training and this can best be overcome by making some courses mandatory for certain appointments. A system which clearly identifies those posts which require officers to attend a course before assuming the appointment would also be beneficial for those responsible for planning and conducting the training. Much closer liaison between those providing the training, such as the School of Ordnance, the potential trainees, and those responsible for loading the courses, is necessary.

Course content needs to be kept under constant review and the principal mechanism for this is the DGOS Syllabus Review Committee. This has rarely involved itself in management training in recent years and this is a situation which must be rectified as soon as possible. A comprehensive review procedure, on a cyclical basis, must be re-instituted, widely publicised and rigorously adhered to. A two-yearly cycle is recommended. Satisfactory training objectives do not exist

for many School of Ordnance courses at present, although action is in hand to rectify this, and few courses have been the subject of external validation. This is essential if the necessary feedback from previous students and their employing officers is to be forthcoming to assist the work of the DGOS Syllabus Review Committee. These shortcomings in policy and procedures are fundamental and it is recommended that action is taken to correct the situation as soon as possible. In particular, the links between training and posting policy must be reinforced and the DGOS Syllabus Review Committee must take a more prominent interest in management training.

8.4 FUTURE TECHNICAL MANAGEMENT TRAINING

As we have already seen, there are serious gaps in the provision of technical management training. There is little specific to RAOC training after the OOs course which, in many respects, reflects the absence of a coherent policy or doctrine in several important areas of the Corps. Examples which fall into this category include the following:

- a. There is no training for officers in combat supplies management.
- b. Officers filling depot and certain staff appointments are not updated on warehouse methods or inventory management.
- c. Formation ordnance representatives at Major and Captain levels are not trained for these appointments.

Although many of these appointments do not require extensive specialist knowledge, they are, nevertheless, important and often complex tasks and some course based training is essential. They are often high visibility appointments, in so far as they bring officers into close contact with other elements of the Army, but they are frequently not accorded the status they merit.

Provision Training. Apart from the introduction to Provision which forms part of the OOs course syllabus, there are two courses currently available for RAOC officers and these were described in Chapter 4:

- a. Officers Primary Provision Course. Although this is designated as an officer's course, the majority of course vacancies are filled by SNCOs (and their civilian equivalents). It is not sensible to offer the same course to personnel ranging from Administrative Officer (AO) to Lieutenant Colonel. It is, therefore, recommended that the Officers Primary Provision course is reduced from four weeks duration to two weeks and that

attendance is confined to Majors and above. The course should be retitled the "Primary Provision Management Course" to emphasise the management content. Selected Captains could also attend if filling appropriate appointments. The content of the revised course should place greater emphasis on decision making and the formulation and interpretation of provision policy and rather less on form filling. The course should be scheduled twice a year, but this may be reduced to once a year if less frequent turnover of personnel can be achieved. Meanwhile, a lower level course will be required for Captains and below and it is recommended that this is of three weeks duration to permit more time to be devoted to teaching the Provision Review Form. This course should be known as the 'Basic Primary Provision Course' and should be regarded as a first step towards the 'Management' course for selected personnel.

b. Officers Secondary/Tertiary Provision Course. This course is satisfactory and changes to the format and syllabus are not required at present. More effort should, however, be made to ensure that officers attend the course before assuming their appointments.

Formation Ordnance Representatives Course. A Formation Ordnance Warrant Officers (FOWO) Course is run once a year to prepare selected Warrant Officers for appointments at Divisional and Brigade level. It is surprising that similar training is not available for officers about to assume supply appointments in Divisional or District headquarters. It is recommended that a short course is introduced to cover the duties and responsibilities of formation ordnance officers in both the materiel and combat supplies fields. The course should be of three weeks duration and should be run twice a year. The course can be designed to run concurrently with the FOWO course, but officer students will be separated from Warrant Officers for some parts of the course.

Advanced Depot Management Course. Apart from the small number of officers who choose to study related subjects at UMIST or CIT, there is no training for potential depot and Directorate of Supply Management (DSM(A)) officers beyond that which is included in the OOs course. This is, perhaps, the most startling omission in the current training programme. The scope for savings and increased efficiency in depot operations is now patently obvious. Inventory, or materiel, management is the Corps largest single function but arguably the most neglected in terms of training. It is, therefore, recommended that an Advanced Depot Management Course is introduced. This course, which should be attended by all officers assuming a depot appointment for the first time and nominated officers from DSM(A), will be run once a year at,

initially, the School of Ordnance. In the longer term it may be possible to ask RMCS/CIT to design a suitable package which could then be run at either RMCS or the School of Ordnance. This is the approach which has been adopted by the Royal Corps of Transport (RCT) and a substantial element of the Advanced Transport Course is now taught at RMCS. The provision of progressive, professional training would go a long way to raising both the status and efficiency of depot operations.

All of the courses referred to above must be regarded as essential for officers filling appointments in the areas concerned. Attendance on the appropriate course should, therefore, be mandatory. This must be reflected in job specifications and endorsed on posting orders by PB9. This is now beginning to be implemented in a few cases. It must be extended to cover all appointments to technical management posts.

In addition to formal courses, there is considerable scope for organising seminars and/or conferences to update officers on current trends in technical management subjects. The seminars could operate at Captain/Major level and/or Lieutenant Colonel and above. They could also be held in a variety of geographically suitable locations to ensure maximum attendance. By limiting the seminars to one, two or, at most, three days duration officers will not be required to be away from their units for extended periods.

The lack of professional training for officers involved in the management of equipment and stores at all levels is very serious. Some of the main gaps in the current provision of technical management training have been identified and several additional courses to help to correct the shortcomings have been recommended. The introduction of both the Advanced Depot Management Course and the Formation Ordnance Representatives Course should have a significant impact on performance in these rather neglected areas. In the longer term it should be possible to incorporate training in these disciplines into a more cohesive area of expertise, perhaps leading to formal professional qualifications. This will, however, demand a higher degree of specialisation than is currently the norm and this will apply at all levels, including senior officers.

8.5 FUTURE GENERAL MANAGEMENT TRAINING

The research has indicated that the current pattern of general management training, which is concentrated on the middle-piece officer (of Captain and Major rank) is broadly correct. However, if the training is to be progressive and continuous, it must also cater for junior and senior officers, and it has been shown that senior officers, in particular, are poorly provided for. The majority of officers are

also unlikely to receive any formal general management training beyond the three weeks MMD course. Several measures are recommended to fill some of the more obvious gaps without changing the overall pattern or sequence through which an RAOC officer's career is likely to pass, because this is, in part, determined by Army-wide requirements.

Junior Officers. Newly commissioned officers attend the five weeks YOs course at the School of Ordnance immediately after completing their RMAS training. The YOs course is intended to induct the young officer into the Corps by providing the initial special-to-Service training which builds on the All Arms training at Sandhurst and equips him for his first appointment in the Corps. The syllabus for the Commissioning Course at RMAS does not refer to management training as such. It does, however, include many topics which have managerial connotations, such as communication, leadership and administration. Similarly, the YOs course, which in some respects is a continuation course, includes a number of subjects which are management related.

The main management skills required by the junior officer were considered to be communication and leadership skills and these are already adequately covered at Sandhurst and by the YOs course. It would not, therefore, be appropriate to introduce a separate management training course at this early stage in an officer's career. The majority of newly commissioned subalterns will serve their first posting with an RAOC field force unit and the YOs course syllabus concentrates on field logistics. The YOs course does, however, also aim to make young officers aware of the role and organisation of the Corps and their career opportunities within the Corps. The current programme of lectures and visits should suffice to make the young officer aware of the way in which a large and complex supply organisation like RAOC is managed and major changes are not required.

Middle Officers. It is now common practice for most officers to attend the OOs course as senior Lieutenants. In consequence they also attend the MMD course at a comparatively early stage in their careers. They are relatively inexperienced and their contribution to what is intended to be a very participative course is sometimes limited by this lack of maturity. The MMD course must be kept under review to ensure that it is appropriate to the needs of the officers who are likely to attend it.

In the short term, the most crucial deficiency in general management training provision is for those officers of senior Captain and Major rank who are not selected for Staff College or postgraduate management training. A new course is required for these officers. This course should be of four weeks duration and should be regarded as

a direct replacement for the now defunct Senior Management Development (SMD) Course. The SMD course failed for a variety of reasons. These included the fact that attendance was not enforced, the content was not always relevant and some of the instructors lacked credibility. The syllabus and teaching methods for the new course would have to ensure that these pitfalls were avoided. The course would need to be participative and, preferably project based, in so far as students would be required to undertake a small study or produce a significant piece of written work based on a management situation in their own unit. This might require the course, of which there should be one a year, to be in two parts. Much of the course content could be modelled on the syllabus for the Senior Course at Henley, the Management College, and the widest possible use would need to be made of external, invariably civilian, lecturers. Some of the RMCS lecturers have indicated that they would be very willing to become involved with this training.

In the longer term, officers could be required to study by distance learning methods, using either existing commercial courses or courses tailored specifically for the Corps' needs. Two excellent distance learning packages are readily available. The first of these is offered by the Open Business School (a part of the Open University) and the second is produced by Henley, the Management College. In the first instance the Corps might only be interested in "The Effective Manager" modules, which form part of both packages. Selected officers might, however, be given an opportunity to study the complete courses, which can lead to formal academic qualifications. The subject of qualifications will be examined in more detail later. One of the main drawbacks of distance learning is that it is still relatively expensive, but some of the costs can be reduced by using existing facilities, such as the School of Ordnance, and possibly by allowing suitably qualified officers to be licensed as tutors. These and other factors need to be studied in more detail before the Corps commits itself to using the distance learning approach for management training.

Senior Officers. The management training needs of senior officers do not lend themselves so readily to the collective prescriptions recommended for other groups of officers. Ranks range from Lieutenant Colonel to Major General and the officers concerned fill a wide variety of appointments, few of which are exactly the same. Assuming that they have been adequately trained at earlier stages in their careers, (and this is not always the case), senior officers' training needs are likely to be the direct result of one of a number of special circumstances. These may include posting to a new appointment, changes to the demands of the current post or simply the need to update or refresh previous training. It will seldom be possible to devise a

course which satisfies the requirements of more than a small number of senior officers. Even if such courses were readily available, few senior officers would be able to find sufficient time to attend courses which lasted for more than two or three days.

Responses to the management training survey described in Chapter 5 indicated that there was quite a widespread feeling that the management training needs of senior officers were not given sufficient attention, and many officers specified subjects with which they were not entirely comfortable. Subjects most frequently listed included setting and controlling budgets, the use of microcomputers and information technology, the management of change, and problem solving/decision making techniques. Technical management expertise was also thought to be an area needing more training. Some of these training needs are already covered by existing courses, but many of the courses which are provided are underutilised by RAOC officers. There are probably a number of reasons for this - inadequate publicity, shortage of places or a lack of time may be contributory factors. Nevertheless, it is important that the best possible use is made of existing courses, such as those at Henley and Monterey and the Senior Officers Logistic Course. These are all very sound courses and they should continue to be used. A clear policy statement detailing the number of officers to be selected for these courses each year is required. Provided attendance can be funded, an RAOC officer should be nominated for each of the two Senior Courses run at Henley each year. Senior officers must also be more willing to attend technical management courses, such as the Officers Primary Provision Course, the Equipment Management Course, and the like, where these are applicable to specific appointments, and the Advanced Depot Management Course when this is introduced.

Several of the training needs mentioned by a substantial number of officers are universal and reflect the heightened financial awareness in the Services and the increasing importance of information technology. Courses are now becoming available in these subjects. In the case of financial management, courses are available at RMCS and at MOD. Several short microcomputer courses are available at the School of Ordnance and at RMCS. Some of these courses are under-subscribed and additional courses are probably unnecessary at present.

With the exception of the course already mentioned above, the disparate management training needs of senior officers can probably be met only by attending external, civilian, courses. A plethora of these are now available and some expertise is needed to circumnavigate a potential (and often very expensive) minefield. Courses are run by a variety of commercial organisations, including several reputable colleges such as Henley and Ashridge, and many of the professional bodies, such as the

British Institute of Management (BIM) and the Institute of Purchasing and Supply (IPS). An advisory or consultancy service might be provided by the Management Wing of the School of Ordnance to make senior officers aware of the courses which are available and which would suit particular needs. Funding this type of training might be a problem and HQ DGOS would have to provide the necessary finance through the military Technical Training Vote system. The feasibility of this needs further study.

Perhaps more than any other group of officers, senior officers have a responsibility for their own self-development. Keeping up-to-date or learning new skills does not always require attendance on a training course. Selective reading, active membership of professional bodies, formal and informal contacts with civilian organisations, enrolling for evening classes and the use of distance learning material are all options which are readily available to most senior officers. All officers must be encouraged to take a positive approach to their own self-development and senior officers have a duty to set a good example in this respect. Something of a culture change is needed in the Army to make self-development a more acceptable concept and many officers need to devote more of their own time to acquiring professional skills and knowledge. The contrast between military custom and civilian practice is quite noticeable. A recent study by Deloitte, Haskins and Sells (4) indicated almost 80% of managers in their survey would be willing to spend, on average, 5.5 hours per week obtaining a qualification.

Whilst acknowledging that senior officer training needs are not particularly well catered for at present, some of the onus for this must be placed on the officers themselves. The courses which are available must be fully supported and this applies especially to some of the new courses which are being developed to meet known training needs. Some scope exists for officers to attend external courses to meet specific training needs but the funding for this type of training is likely to be rather limited. Senior officers must also recognise that they have a responsibility for their own self-development and a positive and determined approach to this must be encouraged. Finally, in the longer term, some of the current training needs of senior officers are likely to diminish as middle officers - who will be better trained and qualified in the future - move through to senior rank. The over-riding need will then be for updating or refresher training to equip them for their new responsibilities.

School of Ordnance. As the School of Ordnance is the main agency for ensuring that RAOC officers receive the management training they require in order to perform efficiently and effectively, it is appropriate that it should be subjected to close scrutiny in this study. The courses which are run at the School, and recommended additions to the programme, have already been discussed in detail. There are, however, a number of other aspects of the organisation and operation of the School which can be improved upon.

Unlike civilian training establishments, but in common with most military units, the School of Ordnance does not advertise its product in an attractive way. Greater attention could be given to publicising the courses and seminars which are available and ensuring that this information reaches the correct audience. Although many courses are loaded by external sponsors, there are often a small number of vacancies available on each course and very few courses are over-subscribed. When class sizes fall below a certain level the courses are either not viable and must be cancelled or the "productivity" of the training resource is diminished to an unsatisfactory extent.

The way in which instructors are selected for training appointments is somewhat arbitrary. Fortunately the majority of those officers who are selected for these demanding posts quickly adjust to the requirements of the task and invariably perform very satisfactorily, given that they have probably not been trained to carry out the task. Knowledge of the subject to be taught is not in itself sufficient qualification for imparting that knowledge to others. In some cases it is possible for officers to attend a Methods of Instruction course at the Royal Army Education Corps (RAEC) Army School of Training Support at Beaconsfield. These courses do not, however, train an instructor in the more advanced training methods used in management training, where syndicate activity, discussion groups and similar participative methods are essential features. Much is left to trial and error. Most instructors improve enormously during a tour as they receive feedback from students and as their confidence develops, but this takes time. There is, therefore, a good case to be made for extending the average tour of duty for an instructor from the present two years to a norm of three years. Obviously officers with no aptitude for this type of appointment should be replaced at the earliest opportunity and without censure. Instructors must be given every opportunity to improve their performance by attending "train the trainers" courses and workshops. These will usually be held at civilian training establishments and must be funded accordingly. Those officers who are particularly gifted instructors should be given an opportunity to develop in this field by being given further teaching appointments at suitable intervals in their career. Longer tours will not, however, overcome the problem of

instructor credibility and this is sometimes particularly relevant in the general management training field, where it is often preferable to use non-military guest lecturers. If the more advanced courses which have been recommended are introduced there may need to be greater dependence on external lecturers for some subjects. Longer tours of duty as an instructor would enable individuals to make better use of some of the modern teaching technology which is available. Audio-visual training aids, CCTV, and some open and distance learning methods require more expertise if they are to be used effectively. The School of Ordnance is equipped with many of these modern teaching aids but they are not always well used, often because instructors are unaware of the applications of the equipment or because they are still learning their craft.

8.5 FUTURE MANAGEMENT EDUCATION

Undergraduate Courses. The opportunity to gain academic qualifications is a sound recruiting incentive for some officers and should not be underestimated. This can apply to both the uncommitted school-leaver prior to joining the Army and to the potential RAOC officer at Sandhurst. There are, however, a number of stumbling blocks to any significant increase in the number of officers reading for in-Service degrees. In recent years the Corps has recruited a substantial number of graduates (almost 50%) and this reduces the number of non-graduates who might be eligible for a university education. The intake of non-graduates has also been somewhat older than normal and this further reduces the field. An officer must begin degree training at the earliest opportunity if he is to avoid being career-fouled at a later stage. Similarly, many young officers are reluctant to commit themselves to a full career in the Army and initially join as Short Service officers and thus, unless they can be persuaded to convert to regular commissions, are unlikely to be offered the opportunity to study for an in-Service degree. Finally, a proportion of officers do not have the necessary university entrance qualifications on commissioning. There is, of course, no reason why this group of officers should not be given every encouragement to obtain the appropriate GCE 'A' level passes to secure a place at university and the Corps could, perhaps, take a more positive approach to this. Whilst not, at present, advocating an all graduate entry for RAOC officers (although this is already a requirement of both REME and RAEC), this could happen in due course. A move in this direction can be achieved by increasing the number of scholarships or bursaries awarded to potential RAOC officers.

In-Service degrees may be read at a variety of locations at present and no significant change to this practice is required. There is some

merit in allowing young officers to attend traditional universities, rather than automatically directing them to RMCS without careful consideration of their individual needs and the subjects they wish to study. The majority should, of course, be encouraged to select subjects which are relevant to the Corps and several of these are offered at RMCS, including Applied Science and IT degrees. RMCS is still considering the introduction of a BSc Management Science degree and if this eventually materialises it should be given strong support. Meanwhile, this remains a very relevant subject to be read at UMIST, or elsewhere. One subject which is not currently available either at RMCS or elsewhere and which might be attractive to both RAOC and RCT officers is a first degree in Physical Distribution or Logistics Management. RMCS/CIT may be interested in developing such a course if sufficient demand exists.

In many cases the subjects selected can be directly related to future career opportunities and posting policy, but only if the individual is keen to commit himself to a narrow field of employment at an early stage. Some emphasis on science-based subjects is desirable for many officers because this will make them more widely employable as technical or weapons staff officers. Nevertheless, the view that first degree training is primarily intended to produce a trained and inquiring mind is strongly supported. The subject actually studied is in many respects of less importance than the myriad benefits of a successful university education.

Postgraduate Management Courses. The skills and knowledge required by competent managers and the way in which training can assist officers to acquire the requisite attributes and managerial tools were discussed in earlier chapters. It was also clearly established that much of this training must be experiential and that a training course cannot by itself - even at university level - turn out a fully qualified manager. Any course must be selective in so far as not all subjects can be treated in the same depth or detail. Eilon (5) considers that a postgraduate management programme should attempt to achieve a balance between the following four categories:

- a. Supporting subjects, the basic knowledge of which is required in order to study at a reasonable level some subjects in other categories. Mathematics, probability and statistics, computing, sociology and psychology may be regarded as supporting subjects.
- b. Subjects relating to the external environment, in which the organisation has to operate, such as general economic theory, fiscal policy, industrial and international law, politics, and others.

c. Subjects relating to the internal environment of the organisation, such as operational research, managerial economics, organisation theory, and each of the functional areas of the organisation.

d. Subjects which may be included in the programme in order to 'liberalise' the student, such as philosophy, the arts, and languages.

Eilon goes on to point out that there are two extreme approaches that can be adopted in the design of the curriculum. One may be termed the single programme approach, which presents a carefully thought out range of subjects which - however arbitrary their choice may seem - every student must take. The second approach is to present a wide range of subjects from which students have to make a selection and the choice may be so wide that two students emerging from the same programme may have covered mutually exclusive sets of subjects. Each approach has its advantages and disadvantages and many universities compromise by having a core of compulsory subjects that ensures a minimum substantive knowledge in key areas, coupled with a range of elective subjects to cater for diverse interests and to allow some specialisation. It is the latter type of course which is most relevant to the needs of the Corps and its officers.

The present management science course at UMIST has changed enormously since it was first introduced exclusively for RAOC officers in 1949. RAOC officers now form a very small element of the total number of students on the MSc or diploma programme and the course content has gradually moved away from its original very general syllabus. It has become much more specialised and officers now study in a comparatively narrow field. There are many management topics which the average student scarcely touches during his course and in consequence specialists, rather than generalists, are being produced. But as the Corps is by and large unaware of the specialist skills which have been acquired, they are rarely utilised. There are, for example, considerable differences between the content of the Industrial Relations and Personnel Management package and the Operations Management speciality. Similarly, the MSc in Distribution Technology and Management at CIT devotes most of its attention to the physical distribution function, which is relevant to some parts of the RAOC operation, but ignores many other management topics. There are also elements of the Distribution Technology course which are not entirely applicable to the Corps, including transportation themes.

Although the courses at UMIST and CIT appear to achieve the aims laid down in DGOS Training Instruction No 2, it is very much open to debate whether these objectives are entirely relevant to the needs of the Corps. If the Corps is to continue to select officers for postgraduate management training, these aims need to be reviewed and refined. The best interests of the Corps are most likely to be served by a fairly general syllabus of core subjects, but one which will also allow an individual to specialise to a limited extent in one or more electives which are of particular interest. In certain circumstances, in order to meet specific requirements of either an individual or the Corps, it may be necessary to select an officer for a more specialised course. It is, therefore, recommended that DGOS Training Instruction No 2 is rewritten in general terms to show a single aim for all postgraduate management training, without specifying the institutions officers may attend or the courses which they may study. This will provide some flexibility and allow the Corps to utilise some of the alternative courses which are now available. By restricting officers to UMIST, and more recently CIT and RMCS, the Corps may be missing opportunities to place students on courses at other institutions which offer better options for both the individual and the Corps. Most universities, and a number of polytechnics, offer management related postgraduate degrees. As we have seen, the Master of Business Administration (MBA) degree is the most widely available course and this is now becoming recognised as the most useful qualification for general management.

In the past the Corps has always released officers for an academic year of full-time study at UMIST or CIT. In an era of manpower shortages this may be a luxury we can no longer afford. Many universities offer part-time courses which only require attendance at the university for short periods of time. The conditions of attendance vary considerably. They range from one day per week throughout the year to the occasional long weekend or to intensive periods of two or three weeks at a time. The ability to retain officers in post whilst studying has some obvious attractions and could enable a large number of officers to have access to postgraduate management education. It should, however, be noted that few of the Corps' UK base installations are in close proximity to the universities offering part-time MBA or MSc courses.

The development, and increasing sophistication, of distance learning methods was highlighted in Chapter 3. Several universities are now offering MBA degrees by distance learning and these may also be of interest to the Corps. Although this type of course cannot be considered as a satisfactory alternative to full-time (or even part-time) study, it might enable a small number of officers, who would not

otherwise be eligible, to obtain management qualifications. Their studies would, of course, need to be funded and the officers themselves very highly motivated.

Another alternative route to an MBA which is proving increasingly popular is the modular degree. This has been pioneered by Henley, the Management College, in conjunction with Brunel University, but is now being imitated by other colleges and universities, as described in Chapter 7. Periods of residential study are interspersed with periods at the place of work and in some cases the intervals between the residential elements of the course can be extended indefinitely. A student builds up 'credits' by completing modules and passing the appropriate examinations until such time as the full course is completed. This could also be a useful alternative for some officers as 'credits' could be accumulated throughout their career until such time as they graduate.

So far the emphasis has been placed on postgraduate management training. As the need for technical expertise in the Army increases, so the requirement for better qualified officers will also be seen in other areas. Information technology is one of the more obvious areas in which the Corps has a need for a high level of expertise and RMCS offers an MSc in the Design of Information Systems (DIS). Suitably qualified officers should continue to be considered for this course. The Corps must also encourage officers to take advantage of the opportunities afforded by Defence Fellowships and similar Army sponsored higher degree courses. Whenever possible the short term problems of manpower shortages should not be allowed to interfere with the long term benefits to be derived from well qualified RAOC officers.

As far as possible officers should continue to be selected at the senior Captain/junior Major level and priority should be given to officers who have passed their promotion and staff selection examinations, but have not been selected for Staff College. There is concern that officers who have attended the Army Staff Course are not eligible for selection for postgraduate management training. In many cases they are the officers who would most benefit from this training in view of the posts which many can expect to fill later in their careers. An opportunity for 'psc' officers to receive postgraduate management training would be created if selected Lieutenant Colonels were to be nominated for this type of training. The Royal Engineers are now selecting officers to attend the UMIST MSc course and their selections are always junior 'psc' Lieutenant Colonels. The need in the longer term is for more flexibility in the rank and age at which

officers may be selected for postgraduate management training, in order to ensure that those who would most benefit from the training are able to receive it.

One of the main reasons why the Corps is not deriving full benefit from the postgraduate management training which is currently undertaken stems from the absence of a clear link between the training and subsequent postings. It is considered to be essential that officers are pre-posted to their next appointment before attending university. The personnel branch (PB9) has indicated that this is feasible, although there may occasionally have to be amendments to the posting plot because of unforeseen circumstances. The main benefit will be reflected in the subjects which students elect to study as they will be able to concentrate on topics which are likely to be most relevant to their next appointments. An officer posted to a depot planning appointment is likely to have different training needs to one filling, for example, the Functional Planning Unit post at HQ DGOS, or a manpower planning appointment at PB9. The Royal Air Force, who also send students to UMIST, have been successfully using this approach for many years. It is recommended that the Corps follows suit as soon as possible. It is also recommended that a record is maintained of the subject areas in which students have specialised so that their specialist skills can be properly utilised in subsequent appointments.

The other main area where a more direct link between training and posting policy might be beneficial is in the selection of research topics. The Corps is currently deriving very little direct benefit from the many detailed studies which are undertaken each year. Although research methodology is in itself a useful skill and one which is transferable to a military context in later appointments, there is no reason why the actual research topics should not also be relevant to current issues in the Corps or the Army, and especially in the supply and logistics field. If the taught part of a university course is regarded as an input to the student, the research element can equally be regarded as an output, and ideally this should be of value to both the student and his sponsoring organisation. Some educationalists might argue that the student derives more benefit from researching in an area with which he is not familiar, as he will then avoid the dangers of preconceived ideas or previous conditioning. Whilst this is probably valid at undergraduate level, the mature student should be able to circumvent these limitations. Certainly the Corps is missing an opportunity to have a variety of worthwhile and comprehensive studies undertaken by its students. Officers who knew where they were to be posted on completion of their course could, in consultation with their next unit and their university tutors, identify research subjects which might be of value in their next appointment. At present there is

virtually no consultation between the student and the Corps before a research topic is selected. This situation must be rectified as a matter of urgency and all officers must have their proposed research formally approved before it is undertaken. This will require the submission to HQ DGOS or to the School of Ordnance of proposed terms of reference or, for university purposes, an outline Topic Analysis. This may well necessitate further consultation with the student and his supervising tutor before permission to proceed is given. As the resultant thesis or dissertation is likely to be written in an academic format to satisfy the university's requirements, a synopsis or summary of findings and recommendations will probably need to be prepared by the student for military purposes.

An officer who successfully completes a postgraduate management training course is awarded the symbol 'im' in his Army records. He does not receive any other recognition and, indeed, loses the benefit of an annual Confidential Report whilst he is at university. As a direct result of this he is unlikely to be considered for promotion to Lieutenant Colonel at the earliest opportunity. This can, in some cases, be a disincentive to an officer and he may decline to accept nomination for a university place. The symbol 'im' has in the past been awarded to officers who have a first degree in a management discipline and, in particular, to those with a BSc in Management Sciences from UMIST. The symbol 'im' should only be awarded for postgraduate study. Experience is an essential ingredient of management expertise and undergraduates do not normally have the requisite experience. The main implication of this recommendation would be that officers holding first degrees in management subjects would be eligible for selection for postgraduate training. This would make their training more progressive and give improved opportunities for career development.

8.7 A UNIFIED STRUCTURE

Qualifications. Until recently the Army has been rather ambivalent about professional, civilian qualifications. They have been widely regarded as being very desirable, but few resources have been made available to enable officers to obtain them. There are many reasons for this, but the over-riding factor has probably been that whilst qualifications are clearly seen to be of value to the individual, they are less obviously so to the organisation. This attitude is changing rapidly as the Army becomes more technologically advanced and tertiary level education becomes an essential pre-requisite for many appointments. The three 'Rs' - in this context, recruitment, retention and, eventually, resettlement - have also had a part to play in this change of attitude. Last, but not least, the status of the officer

corps, both within and, more importantly, without the Army, is increasingly being judged by the expertise and professionalism of its members. Qualifications are an obvious, if superficial, manifestation of these attributes. However, to be worthwhile, qualifications must be relevant and the acquisition of knowledge and skill which they reflect must be able to be applied. This section looks briefly at the subject of qualifications for RAOC officers and a number of related issues.

In an ideal world all officers would be given ample opportunities to acquire formal qualifications which would be of benefit to them in the performance of their current duties and would ensure their employability in the future. For most Arms and Services, career patterns do not always make this possible, and RAOC is no exception to this. There is, however, some hope that this situation can be ameliorated in the near future. As the ROCS (6) report states:

"We strongly support the negotiations now being undertaken by the Director of Army Training (DAT) to secure acceptance of Sandhurst training as a first step, followed by others such as staff and long courses, towards a qualification recognised by the Council for National Academic Awards. This could be on the lines of the recently announced 'Credit Accumulation and Transfer Scheme' in which periods of formal training and experience can accumulate towards the grant of a qualification recognised in civilian life".

RAOC is in a particularly strong position to capitalise on this type of approach because of the number and variety of long course opportunities which exist. It may be preferable for the Corps to create its own direct link with a degree granting institution in order to devise an acceptable training structure which will culminate in the award of a Masters degree based on experience and formal study.

Many universities are now working closely with industry to design courses which satisfy the training requirements of the major companies but which also have academic credibility. The modular MBA at Henley/Brunel University, which was described earlier, is one example of this cooperation. The Executive MBAs offered by several other universities and polytechnics fall into the same category. City University Business School is adopting a slightly different approach in the development of a Consortium MBA, and this was described in Chapter 7. Here a consortium of large companies, which already provide substantial in-house training for their employees, work together and in conjunction with the university to provide students with the necessary training to enable them to eventually carry out a project or study. This is

then assessed on the same basis as a Masters degree thesis or dissertation. Because so much of the work is based on the student's current employment, both the individual and his organisation are likely to derive maximum benefit from this type of joint venture. A similar approach could be adopted within the Corps and this could culminate in the award of what might be described as a Corporate MBA.

The concept of training as a series of inputs which facilitate the production of desired outputs is very relevant in this context. Experience and formal study are inputs and the project or thesis is an output. The inputs must, of course, preface the output if the quality of the output is to achieve the required standard and these inputs would need to be carefully monitored. Many years of both formal and informal training might be necessary to enable a student to undertake the research part of the programme with high expectations of success. By creating a clearly defined link between career progression, training and a professional qualification there could be considerable benefits for both the individual officer and the Corps. First thoughts on an outline structure which shows how 'credits' might be accumulated prior to undertaking a research project are described below.

The majority of an officer's training is carried out from Subaltern to Major. At an All-Arms or Army level, training starts at RMAS and continues through JCSC and the Captain to Major promotion examination. About a third of all officers go on to the ASC. A small number of selected officers who do not have degrees on entry read for an in-Service degree. Each of these stages would be expected to attract one or more 'credits'. Within the Corps an officer attends the MMD course, the OOs course, and is normally selected for a long course in the ammunition, food supply, ADP or POL specialist functions. Again, each of these stages would be recognised by the award of 'credits'. (The proposed Advanced Depot Management course and the Senior Management Development course would also fall into this category). In addition to the currently available training, an officer would be required to undertake more detailed study in compulsory or optional subjects by a combination of distance learning or part-time study. Some of the Henley, Open Business School or RMCS modules might be included in this study requirement. Several of the professional bodies such as BIM and IPS offer courses which might also be utilised in this way in order to obtain additional 'credits'. Where possible, officers would be encouraged to study subjects which were of direct relevance to the appointments that they were currently filling because they would then derive immediate or short term benefits, as well as the longer term ones.

In order to qualify for the award of a Corporate MBA, or an equivalent qualification, an officer would be required to carry out a substantial study or project, which would need to be written up as a thesis or dissertation and presented for evaluation. A multitude of studies and investigations are undertaken by RAOC officers each year and many of these might be developed into research topics - thus fulfilling two objectives. Bearing in mind the reservations which were expressed about some of the research topics which have been selected by UMIST and CIT students in the past, some control would probably need to be exercised by the Corps and the supervising academic tutors to ensure that both organisational and individual needs were met. The research project would be undertaken at senior Major or Lieutenant Colonel level. There are a number of reasons for this. Using the 'credit' accumulation procedure it is unlikely that more junior officers would be eligible to embark on this element of the Corporate MBA. Similarly, junior officers will not always have the experience and maturity to undertake a satisfactory study. By delaying eligibility until senior Major/Lieutenant Colonel level some officers may be encouraged to prolong their Army career.

The need to give officers an opportunity to gain professional qualifications is now widely acknowledged. A qualification based partly on in-Service formal training and experience is an attractive proposition and there are several similar schemes under development as a result of industry and university cooperation. An RAOC sponsored scheme leading to the award of a Corporate MBA has been outlined. It must be stressed that this proposal is only in an embryonic state and there would undoubtedly be many practical problems to be overcome before it could be introduced. The introduction of such a scheme could prove to be of enormous benefit to the Corps and its officers and certainly merits further study.

A brief word is also required about the role which professional institutes might play in the management development of RAOC officers. The wide variety of tasks in which RAOC personnel are involved brings many members of the Corps into frequent contact with areas of civilian management. Personnel management, work study, purchasing and supply, logistics and physical distribution management, information technology, office administration, training, and materials handling are all areas of professionalism in which officers have involvement and expertise. In many cases RAOC officers hold recognised qualifications which qualify them wholly, or in part, for membership of a number of professional institutes. Some of the institutes or societies with which RAOC officers currently have connections were shown in Chapter 6.

Many officers are not aware of the range and scale of the activities of some of these professional bodies and the benefits which active membership may confer. It is, therefore, recommended that the Corps should publicise details of those institutes with which officers may wish to become involved. The Corps Gazette, the DGOS Information Bulletin and noticeboard information might all be used for this purpose. Although membership is normally obtained on an individual basis, there may be some merit in the Corps fostering formal links with some of these professional bodies, in the way that corporate links are now being forged with IPS. RAOC officers have been appointed as members of the Professional Standards Board and the Education and Training Committee of IPS. The Corps is thus in a position to influence the institute's decision-making processes and ensure that the interests of RAOC officers are represented. It is recommended that the possibility of developing similar links with other institutes is investigated by HQ DGOS.

New Initiatives. A number of new initiatives in management education were described in Chapter 2. Several of these are already giving rise to courses which may be relevant to the Corps' needs. The Handy and Constable/McCormick Reports point to a new structure and system for the education and training of managers. They recommend a two-tier system, with Part I earning a Diploma in Business Administration (DBA) and Part II leading to a full MBA. They argue that the MBA must be more flexible in content, modular in mode, include a period of advanced study and be integrated more closely with career development and work experience. Thus Part I, taken early in a manager's career, would cover core subjects such as economics, accounting and finance, marketing and corporate strategy and Part II would be more specialist in nature and would seek to use and apply the knowledge gained in Part I. Part I could be studied in a variety of locations and institutions, including in-company programmes, while Part II would be taken full-time or part-time at a university or polytechnic business school. Several business schools are already set to launch a DBA as part of a two-tier system. Such a system could be a useful addition to current training for RAOC officers and would fit into the Corporate MBA for RAOC officers which has already been postulated.

BIM, in conjunction with the Management Charters Initiative (MCI), has introduced a Diploma in Management Practice. Building on research into management competencies, this is a practical skills and knowledge package based in part on the Open Business School's distance learning Diploma but utilising in-company tutors and BIM assessment centres to validate the practical element. As this initiative is in its infancy it is too soon to say what impact it will have. At some stage RAOC may wish to consider an involvement in the scheme. The latest MCI

proposals include the introduction of a certificate level qualification, which would be aimed at new entrants to a managerial career and would thus preface the DBA qualification.

The current expansion of management education and training is being hampered by a shortage of suitably qualified and experienced lecturers and tutors. The Corps has a large number of well qualified officers who could play a part in this expansion. The BIM and Open Business School programmes, for example, require in-company tutors. There might also be an opportunity for one or more officers to be seconded to a university as lecturers for a year or two, before returning to the School of Ordnance to run in-company programmes.

All of these proposals need further consideration, but if the Corps is to remain at the forefront of management training and education it must continue to be aware of what is happening elsewhere and be prepared to take advantage of new opportunities. In the long term a combination of full-time and part-time courses, using a variety of methods of delivery, is likely to be more successful than slavish adherence to any one type of course. A great deal of interest in management education has been generated throughout commerce and industry, and academia, in recent months. The commercial and organisational benefits of having a well-trained, highly motivated workforce are now acknowledged and exciting, innovative measures are being taken to capitalise on this. The Corps cannot afford to be left behind.

REFERENCES

- (1) C Handy, "The Making of Managers", MSC/NEDC/BIM, Apr 1987.
- (2) J Constable and R McCormick, "The Making of British Managers", BIM/CBI, 1987.
- (3) D A Kolb, "Experiential Learning", Prentice-Hall, 1984.
- (4) Report of a Study into a Charter for Managers. Deloitte, Haskins and Sells, Sep 1988.
- (5) S Eilon, "Aspects of Management", Pergamon Press, 1979.
- (6) Review of the Officer Career Structure (ROCS), Final Report, Oct 1986.

CHAPTER 9

RECOMMENDATIONS

9.1 CONCLUSIONS

Throughout its long history the RAOC has enjoyed many notable successes and has achieved wide recognition for the way in which it has performed its varied and demanding tasks in both peace and war. A high level of managerial skills and good management procedures have undoubtedly been a major contributing factor to this success. An enduring commitment to management education and training has been an important feature of the last forty years and has ensured that RAOC officers are well equipped for their tasks. However, as this study has shown, there is no room for complacency. There is some evidence that substantial changes are required to current practice if the Corps is to face a changing and turbulent future with confidence.

Whilst acknowledging that there are many satisfactory features of the current arrangements for training and educating RAOC officers, there are a number of weaknesses which must be addressed as a matter of urgency. In general terms, training is concentrated early in an officer's career and there are comparatively few opportunities for middle and senior officers to be kept up to date with the often rapid changes in technology and techniques which are available. As has been demonstrated, some 50% of all RAOC officers receive no general management training beyond that provided by the Middle Management Development course and many receive no technical management training after the Ordnance Officers' course. The measures recommended in this study should help to correct this shortfall in training.

A second area of concern is that some of the courses to which the Corps sends its officers are not satisfying either organisational or individual objectives. This is particularly true in the case of higher management education and a number of shortcomings in the content of the courses currently utilised have been identified. In many respects they are too specialised and the Corps' needs would be met by a more generalised course. The MBA degree would be the most suitable qualification for most RAOC officers. Measures must also be taken to widen the availability of this type of training. There are a variety of methods available for delivering management education and training and the most suitable combinations need to be examined in more detail.

The rapid and accelerating changes which are being imposed on the Army at present - aimed primarily at achieving greater efficiency and thus ensuring value-for-money for the British tax-payer - have created a requirement for new and modified training to cater for the increased importance of many management competencies. Corporate planning,

financial management and information technology have assumed an important role in many officer's day-to-day responsibilities. They must be adequately trained to cope with these new responsibilities.

9.2 RECOMMENDATIONS

For convenience, the main recommendations are grouped under three headings: policy, management training, and management education. These are not discrete areas and all are inter-related. It should also be noted that some of the recommendations can be implemented immediately, but others may need further study.

Policy

- a. Management education and training must be continuous, progressive and universally available to RAOC officers. In many respects a change of culture is required. Training must not be equated simply with attending a course. A new mind set of career-long learning is essential and there must be an increased commitment to self-development.
- b. The link between posting policy, training policy and career planning must be emphasised by ensuring that specific qualifications, or training needs, are identified in job specifications and that posting orders show which courses are required for each appointment. For some appointments the relevant course or courses should be mandatory and this should be reflected on posting orders.
- c. The DGOS Syllabus Review Committee should review all management training courses more frequently, preferably on a cyclical basis every two years.
- d. DGOS Training Instructon No 2 - Officers' Training should be revised to reflect changes in the pattern of, and requirement for, training and also to incorporate the recommendations of this study.

Management Training

- a. Management training must be made more widely available for middle and senior officers and new courses need to be introduced to cater for changing needs.

- b. New technical management training courses which are required include an Advanced Depot Management course for officers assuming a depot appointment for the first time, especially where several years may have elapsed since they attended the Ordnance Officers course, and a Formation Ordnance Representatives course for Captains and Majors who are about to assume a supply appointment in a formation headquarters.
- c. A programme of technical management seminars and/or conferences should be run at the School of Ordnance each year to update officers on topics of current interest.
- d. General management training is required by those officers not selected to attend the Army Staff Course or a postgraduate management course at university. A Senior Management Development course, possibly supplemented by distance learning, is required.
- e. Senior officers should be encouraged to make greater use of existing training opportunities, including internal and external courses, and these must be more widely publicised. A regular programme of general management seminars, aimed primarily at senior officers should be introduced.
- f. The School of Ordnance should advertise its courses, seminars and conferences more widely and more attractively. The normal tour of duty for instructors at the School should be increased to three years and they should be given more opportunities to acquire training skills and expertise.

Management Education

- a. Whilst noting that approximately 50% of new officer entrants to the Corps are graduates, young officers who do not have a first degree should be encouraged to attend university to read for an in-Service degree.
- b. The Corps should continue to select officers for postgraduate management education. Priority should continue to be given to those who have passed their Captain to Major promotion examination and staff selection test but have not been selected to attend the Army Staff Course. Selection should be at senior Captain or junior Major rank, as at present, but could be extended to include Lieutenant Colonels. Those officers who have attended Staff College should not be automatically excluded from the field for selection.

c. In the short term, the Corps should continue to send officers on full-time courses. The best interests of the Corps will be served by a course which is generalist in nature and which consists of compulsory, or 'core', subjects coupled with a range of elective subjects. The MBA degree course meets this requirement. The MBA courses at Cranfield and Warwick University are the most suitable, but if UMIST introduces an MBA degree this will enable the unique link with that establishment to be maintained. The MSC in Distribution Technology and Management at CIT is a specialist course with some relevance to RAOC operations. The Corps should continue to nominate one or two officers each year for this course.

d. As far as possible, officers holding postgraduate management qualifications should be employed in appointments for which they have been specially trained. In the case of officers holding an MBA degree they will be widely employable.

e. Research topics selected by students must be relevant to the needs of the Corps, or the Army, and must be given formal approval before research begins.

f. In the medium term, the Corps should experiment with some of the alternative modes of delivering management education in order to make it more widely available. Modular courses and distance learning courses could help to achieve this objective.

g. In the longer term, the Corps should examine the feasibility of creating a tailored course which utilises current and proposed in-company training in conjunction with more traditional formal instruction at a university or college. Given the academic content of much of the training which an officer receives during his career, a Corporate MBA made up of a series of 'credit' - earning modules should be possible.

9.3 FURTHER STUDY

Within the Corps, further study is required of several of the topics which have been explored in this research. Some of the recommendations for additional, or amended, training are in outline only and more detailed work will be needed to design course syllabuses which meet the identified needs of RAOC officers. In some cases further work is required to calculate the resources, in terms of time, manpower and finance, which will be needed for these courses. Measures must then be taken to make the resources available.

Much of the work on management competencies is still at an early stage. As this work becomes more refined its applicability to the Corps must be monitored. The main features of the activities of CMED and the Management Charter Initiative must also be kept under review and the Corps must be prepared to adapt to new developments in management training and education.

The feasibility of introducing a Corporate MBA, or similar modular qualification, will need to be explored more fully and a close link forged with a suitable academic institution. A decision will be required on the desirability of joining an Army-wide scheme or introducing an RAOC qualification.

Although the research in this study was confined to RAOC officers, they can be regarded as fairly typical of managers in a wide range of public service organisations and, to a large extent, in private companies with a similar role and organisation. Many of the findings of the research will, therefore, be of interest to other organisations which provide their managers with management training or sponsor post-graduate students on management courses. Similarly, the findings will be of interest to the academic institutions which are responsible for supplying higher management education. Further research will, however, be needed to confirm the transferability of some of the findings. Other researchers may seek to extend the study to other organisations with different needs or they could carry out comparative studies of management education and training in other armies or in other educational systems.

ANNEXES

MANAGEMENT DEVELOPMENT AUDIT (1)INSTRUCTIONS

This questionnaire has been designed to assess the management development needs of RAOC officers at various stages in their careers. Although the emphasis is on general management skills, a number of more technical skills are also included for your consideration. Space is provided for you to add any additional subjects you consider to be relevant.

Use the following scale to indicate training needs at each of the three levels - Junior, Middle and Senior Management:

Training in this area is essential	4
This training would be useful	3
This training would be of limited value	2
Definitely not required	1

Write the appropriate rating - scale number in the boxes at the end of each item
Do not leave any empty boxes.

	JUNIOR (Subalterns)	MIDDLE (Capt/Maj)	SENIOR (Lt Col & above)
1. Adapting modern theories of management to job situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How to take personal values - own and others - into account in the management of self and subordinates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Effective time management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Coping effectively with stress.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Listening skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Written communications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. How to make oral presentations of information, both formal and informal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Setting goals and objectives, both individually and in groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(1) Based on Manual of Management Development, J E Jones & M Woodcock, Gower 1985.

	JUNIOR (Subalterns)	MIDDLE (Capt/Maj)	SENIOR (Lt Col & above)
9. Managing the participation of subordinates in decision-making.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Problem solving and decision making techniques.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The management of inter personal conflict.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Adapting leadership style to the demands of the task and needs of subordinates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. The development of teamwork within the work group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Making performance reviews to develop subordinates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Coaching employees effectively on their job performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Counselling subordinates on their personal problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Understanding how organizational behaviour affects one's job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Managing the interfaces between groups in the organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. The management of change.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. The management of interdepartmental projects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Conducting effective meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Public speaking skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		JUNIOR (Subalterns)	MIDDLE (Capt/Maj)	SENIOR (Lt Col & above)
23.	The maintenance of good press/ public relations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Conducting interviews .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Recruiting and selecting personnel .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	The induction of new employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	How reward and incentive schemes operate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.	How to negotiate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.	The influence of social, economic and political factors on the work place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.	Handling quantitative information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.	How to carry out a research project/study.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.	The use of Work Study methods .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.	The use of Microcomputers and Information Technology .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.	An understanding of current legislation for employee relations, Health & Safety at Work etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.	Setting and controlling budgets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.	The supervision of contracts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	JUNIOR (Subalterns)	MIDDLE (Capt/Maj)	SENIOR (Lt Col & above)
37. The management of material resources, including warehousing inventory control and provisioning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. (Other training needs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SENIOR OFFICER SELF-ASSESSMENT CHECK LISTINSTRUCTIONS

This questionnaire requires you to focus on your current appointment and the skills and knowledge which are required to enable you to carry out that appointment. A wide range of general managerial skills are listed. You are asked to place a tick against those that most accurately reflect the demands of your appointment. (Column (b)). Where appropriate you are also asked to indicate any training needs you may have. (Column (c) or (d)). (As the questionnaire is anonymous complete honesty is possible!) Space is provided for you to add any management task or training requirements which affect you but which are not listed in the questionnaire.

Management Area	A feature of my current appointment	I'm OK on this	I need to learn more about this
(a)	(b)	(c)	(d)
<u>MANAGING SELF</u>			
Management theory
Time Management
Stress Management
Communication
Setting Objectives
Decision making
Problem solving
Conflict management
Handling statistical information
.....
<u>MANAGING SUBORDINATES</u>			
Leadership styles
Team development
Performance review
Motivation
Coaching and counselling
Delegation
Training
.....
<u>MANAGING ORGANISATIONAL INTERFACES</u>			
Strategic/Corporate planning
Managing organisational behaviour
Managing inter team relations
Chairing or participating in meetings
Managing change

(a)	(b)	(c)	(d)
Negotiating
Reward/incentive schemes
Budgetary control
Employee Relations
Whitley Council
Industrial Law
Manpower Planning
Project Management
.....
<u>MANAGING EXTERNAL RELATIONS</u>			
Managing public relations
Managing customer/ supplier relations
Contracts
.....
<u>TECHNICAL/SPECIALIST SKILLS</u>			
Information Technology
Work Study
Operational Research
Network Analysis
Microcomputing
Procurement
Inventory Control
Warehousing
Provisioning
Cost/Management Accountancy
.....
.....
.....

MANAGEMENT DEVELOPMENT METHODS SURVEY⁽¹⁾INSTRUCTIONS

Management learning takes many forms. Attending a course is only one of many learning experiences which are available for developing managerial skills. This survey has been designed to gauge your views about some of the methods which are being used with RAOC at present or which might be introduced in the future. Each of the activities is described briefly and some of the advantages and disadvantages of each are listed. Place a tick on the appropriate place on the rating scale for each item. Do not leave any items blank. A space is provided at the end of this questionnaire for any general comments which you may have about officer management training in the Corps.

1. In-house Training. Courses organized by trainers and conducted internally, normally at unit level.

AdvantagesDisadvantages

Internal knowledge/skills.
Establishes/maintains unit
culture/practices.
Cost effective.

May become in-bred.
Insufficient expertise available.

- | | |
|---|-------|
| a. A strong feature of our training. | ..... |
| b. A moderately successful feature. | ..... |
| c. An area needing improvement. | ..... |
| d. An option not available but which should be. | ..... |
| e. Not applicable to RAOC. | ..... |

2. External Training. Sending persons to outside courses for special training and/or academic qualifications.

AdvantagesDisadvantages

Increased sensitivity to events
in external environment.
Cross-cultural impact.
Bridges gaps between organizations.
New ideas and approaches.
Challenges assumptions.

May not be relevant to organizational
needs.
Expensive.
Seen as sabbatical or perk.
Difficult to apply back home.
Can create barriers back home.

- | | |
|---|-------|
| a. A strong feature of our training. | ..... |
| b. A moderately successful feature. | ..... |
| c. An area needing improvement. | ..... |
| d. An option not available but which should be. | ..... |
| e. Not applicable to RAOC. | ..... |

(1) Based on Manual of Management Development, J E Jones & M Woodcock, Gower 1985.

3. Training Centre. An organization-oriented training facility usually for in-house training, such as the School of Ordnance.

Advantages

Facilities development of in-house training.
Maximum control of venue/programme.
Potentially holds expense down.
Emphasises training in the organization.

Disadvantages

Must be used often.
May become an empire.
May become an organizational burden.
Keeps trainers isolated.
May increase travel expenditure.

- | | |
|---|-------|
| a. A strong feature of our training. | ..... |
| b. A moderately successful feature. | ..... |
| c. An area needing improvement. | ..... |
| d. An option not available but which should be. | ..... |
| e. Not applicable to RAOC. | ..... |

4. Performance Review. Regularly scheduled appraisals of employee job performance.

Advantages

Provides for individual goal setting.
Improves manager-subordinate communication.
Promotes better career planning/guidance.
Helps to develop employees.

Disadvantages

May not be carried out honestly.
Time-consuming.
Bureaucratic.
May be perfunctory.
Sometimes not goal-oriented.

- | | |
|---|-------|
| a. A strong feature of our training. | ..... |
| b. A moderately successful feature. | ..... |
| c. An area needing improvement. | ..... |
| d. An option not available but which should be. | ..... |
| e. Not applicable to RAOC. | ..... |

5. Job Rotation. Planned movement through various jobs to develop skills, technical expertise and perspective.

Advantages

Gives wide experience.
Generates perspective/awareness.
New ideas, skills, expertise.
Cross-fertilisation.

Disadvantages

Requires frequent adjustment.
Interferes with on-going processes.
May result in coping rather than learning.
May not generate 'helicopter' perspective.

- | | |
|---|-------|
| a. A strong feature of our training. | ..... |
| b. A moderately successful feature. | ..... |
| c. An area needing improvement. | ..... |
| d. An option not available but which should be. | ..... |
| e. Not applicable to RAOC. | ..... |

6. Secondments. Temporary assignments to other organizations, including industry.

Advantages

Cross-pollination.
Influx of skills to new area.
Development of 'helicopter' view.

Disadvantages

Entry/re-entry problems.
Administrative problems.
May be inappropriate assignment.

- | | |
|---|-------|
| a. A strong feature of our training. | ..... |
| b. A moderately successful feature. | ..... |
| c. An area needing improvement. | ..... |
| d. An option not available but which should be. | ..... |
| e. Not applicable to RAOC. | ..... |

7. Using Consultants. Bringing in outside trainers to work in management development activities.

Advantages

Expands resources available for development.
New ideas, fresh approach.
Challenges current practices.
No vested interest.
May help train internal trainers.
Flexibly scheduled.

Disadvantages

May be insensitive to organizational culture.
Expensive.
No on-going responsibility.
May circumvent internal trainers.
May foster dependency.
May be primarily entertainers.

- a. A strong feature of our training.
- b. A moderately successful feature.
- c. An area needing improvement.
- d. An option not available but which should be.
- e. Not applicable to RAOC.

8. Mentoring. Assigning more senior officers to assist junior officers in growing into their jobs.

Advantages

Involves senior officers in management development.
Provides practical guidance.
May ignore performance review.

Disadvantages

Takes valuable senior management time.
May generate insubordination.
May promote jealousy/'favoured person' image.

- a. A strong feature of our training.
- b. A moderately successful feature.
- c. An area needing improvement.
- d. An option not available but which should be.
- e. Not applicable to RAOC.

9. Counselling. Personal development help for employees in their private concerns.

Advantages

Sensitive to individual needs.
Bridges personal-organizational goals.
Fosters corporate spirit.
May uncover organizational problems.

Disadvantages

Requires special training.
Time-consuming.
Threatens privacy and requires privacy.
Creates conditions of confidentiality.
Can create dependency.

- a. A strong feature of our training.
- b. A moderately successful feature.
- c. An area needing improvement.
- d. An option not available but which should be.
- e. Not applicable to RAOC.

10. Coaching. On-the-job assistance by superior and/or by trainers.

Advantages

Job relevant and related to individual needs.
Immediately applicable learning.
Goal-oriented.
Easily linked to performance review.
Involves managers in development.

Disadvantages

Dependent on manager's training skills.
Interrupts work flow.
Difficult to monitor.
May be inefficient.

- a. A strong feature of our training.
- b. A moderately successful feature.
- c. An area needing improvement.
- d. An option not available but which should be.
- e. Not applicable to RAOC.

11. Project Groups/Task Forces. Cross-departmental groups that study problem areas and/or carry out special assignments.

Advantages

Highly task focused.
Cross-pollination of ideas and skills.
Improves organizations fire-fighting ability.
Fosters inter team relations.

Disadvantages

Can disrupt functional work teams.
Can produce unworkable solutions.
May generate non-committal outcomes.

- a. A strong feature of our training.
- b. A moderately successful feature.
- c. An area needing improvement.
- d. An option not available but which should be.
- e. Not applicable to RAOC.

12. Seminars/Conferences. Teach-each-other events for pooling experience and ideas.

Advantages

Pools experience.
Uses resources well.
Flexibly scheduled.
Develops training and communication skills.
Exchange of ideas.

Disadvantages

May pool ignorance/reinforce prejudice.
Often not goal-oriented.
May generate premature solutions.
May cut out external view.

- a. A strong feature of our training.
- b. A moderately successful feature.
- c. An area needing improvement.
- d. An option not available but which should be.
- e. Not applicable to RAOC.

13. Group Training Programmes. Small group oriented training, such as Managerial Grid, T-groups, Transactional Analysis.

Advantages

Utilises group skills.
 Stretches officers personally.
 Intensive.
 Personal.
 Promotes 'togetherness'.

Disadvantages

Can be too personal and threatening.
 Can be manipulative.
 Can promote dysfunctional norms.
 Requires special skills.

- | | | |
|----|--|-------|
| a. | A strong feature of our training. | ..... |
| b. | A moderately successful feature. | ..... |
| c. | An area needing improvement. | ..... |
| d. | An option not available but which should be. | ..... |
| e. | Not applicable to RAOC. | ..... |

14. Open/Distance Learning. Training organized to meet the requirements of individuals in respect of how, when and where they learn.

Advantages

Widens access to learning.
 Very cost effective.
 Flexibility of learning (time, place, pace etc).
 Can be personalised.
 Maximises trainer resource.
 Does not require course attendance.
 Permits modular approach.

Disadvantages

Not inter-personal skills.
 May require access to facilities (video, computer).
 Needs tutor support.
 Needs delivery system.
 Requires good motivation.

- | | | |
|----|--|-------|
| a. | A strong feature of our training. | ..... |
| b. | A moderately successful feature. | ..... |
| c. | An area needing improvement. | ..... |
| d. | An option not available but which should be. | ..... |
| e. | Not applicable to RAOC. | ..... |

15. Comments. (Use separate sheet).

ANNEX D

(1)

SENIOR OFFICER SELF-ASSESSED TRAINING NEEDS

Management Area	A feature of my current appointment	I need to learn more about this
(a)	(b)	(c)
	%	%
<u>MANAGING SELF</u>		
Management Theory	52	16
Time Management	60	28
Stress Management	49	34
Communication	84	12
Setting Objectives	80	14
Decision Making	82	6
Problem Solving	81	11
Conflict Management	58	29
Handling Statistical Information	63	39
<u>MANAGING SUBORDINATES</u>		
Leadership Styles	69	11
Team Development	74	14
Performance Review	77	26
Motivation	72	14
Coaching and Counselling	63	23
Delegation	78	12
Training	62	16
<u>MANAGING ORGANISATIONAL INTERFACES</u>		
Strategic/Corporate Planning	59	37
Managing Organisational Behaviour	48	18
Managing Inter-team Relations	63	18
Chairing or Participating in Meetings	82	10
Managing Change	74	39
Negotiating	43	21
Reward/Incentive Schemes	19	18
Budgetary Control	59	46
Employee Relations	49	11
Whitley Council	31	16
Industrial Law	22	24
Manpower Planning	53	16
Project Management	50	21
<u>MANAGING EXTERNAL RELATIONS</u>		
Managing Public Relations	32	23
Managing Customer/Supplier Relations	40	13
Contracts	40	28

(a)	(b)	(c)
	%	%
<u>TECHNICAL/SPECIALIST SKILLS</u>		
Information Technology	67	57
Work Study	18	12
Operational Research	19	16
Network Analysis	16	14
Microcomputing	67	50
Procurement	40	19
Inventory Control	42	17
Warehousing	31	23
Provisioning	34	19
Cost/Management Accounting	37	39

Note

(1) It should be noted that some of the training needs specified did not in all cases feature in current appointments as some officers identified training needs for subjects which are not part of their present jobs.

CLASSIFICATION OF THE COMPETENCIES OF SUPERVISORS AND MANAGERS

DETAILED CLASSIFICATION

1. Competencies pertaining to dealing with PEOPLE.
 - 1.1 For whom one has responsibility:
 - (a) Selecting (job analysis, manpower forecasting, recruitment, interviewing, selection procedures defining pay and conditions, inducting).
 - (b) Enabling (including planning and implementation, identifying learning, coaching, counselling, monitoring).
 - (c) Guiding (including team building, achieving results through others, appraisal, leading, motivating, delegation, handling conflict leading discussion, chairing meetings, planning work, setting targets, selecting work methods, managing change, managing stress in others, grievance handling).
 - (d) Directing (organisational planning and development, leading).
 - 1.2 Peers, clients and customers
working as part of a team, influencing skills, persuading consulting, liaising, behaviour and needs, informing, responding, handling aggression dissatisfaction and excessive demands, negotiating.
 - 1.3 To whom one reports
reporting informing, accepting direction, responding to objectives.
2. Competencies concerned with MANAGING ACTIVITIES.
 - 2.4 Financial
costing, budgeting, preparation of estimates, resource allocation, budgetary control, controlling resources against a budget, cost reduction, accounting, financial management, financial analysis, employee compensations.
 - 2.5 Systems control
production planning, implementation, control, recording analysis. Quality management, stock control, information processing, creating, developing new products/processes support services, safety, accident/hazard potential identification.
 - 2.6 Techniques
method study, value engineering, strategic forecasting, planning, establishing standards, measuring performance, critical path analysis, value/cost benefit analysis, systems analysis, business plans.
 - 2.7 Functional activities.
3. Competencies reflecting SENSITIVITY TO ENVIRONMENT.

- 3.8 Customer expectations/needs
identification with, and sensitivity to customer/client expectations and needs both within and external to the organisation, link between customer expectation and performance.
- 3.9 Legal considerations
health and safety, employment, industrial relations.
- 3.10 Organisations, social, economic and political company structure
roles, functions, industry structure, industrial/trading community structure, recognition of safety/health hazards, behaviour, organised labour, business ethics, monopoly and competition, macro economics, gaining and sustaining a competitive advantage, business strategy, business plans, shareholders, capital markets, public sector funding, subsidy government/industry relations, competitor awareness, organisational power/politics, organisational cultures and national cultures, market economics, market segmentation and market research, after sales care.

4. Competencies reflecting PERSONAL EFFECTIVENESS

4.1 Communication

- (a) Oral communication (oral presentation, public speaking communicating with those for whom one has responsibility).
- (b) Written communication.
- (c) Data presentation, information processing.
- (d) Selecting methods of communication.
- (e) Listening (identifying emotional and ambiguous statements).
- (f) Reading.
- (g) Information retrieval (including use of IT).
- (h) Keyboard skills.

4.12 Numeracy and use of numerical techniques handling numbers, statistical and other quantitative techniques used in management.

4.13 People orientated

- (a) Willingness to lead, tolerance to stress, self presentation, one to one ability, organisational skills.
- (b) Self confidence, self control, spontaneity, sociability, awareness.
- (c) Conceptualisation, adaptability, perceptiveness, realism, pragmatism.

4.14 Results orientated

- (a) Time management, setting of objectives, diagnostic use of concepts, planning.

(b) Coping with stress, creative, take risk, take initiative, high energy, concern with impact, tenacious, independent, possessing integrity, adaptability, resilient, vision, innovative, decision making, problem solving.

4.15 Self awareness/development orientated

(a) Learning skills, setting learning targets, team member skills setting personal performance standards.

(b) Identifying learning needs.

(c) Self assessment.

SURVEY OF RAOC OFFICERS WHO HAVE RECEIVED POSTGRADUATE
MANAGEMENT TRAINING

INTRODUCTION

As the covering letter explains, this questionnaire has been designed to obtain your views on the relevance and value of the higher management training which you undertook earlier in your career, and also to seek your opinions on ways in which management education and training in the Corps should develop in the future. Although the researchers would have preferred to have conducted personal interviews, this was clearly not possible given the constraints of time and money. A survey of this nature should, however, be an acceptable alternative.

The questionnaire should take you about 40 minutes to complete and it is hoped that you will find it an interesting task. It has been deliberately compiled for ease of completion and subsequent analysis. In consequence many of the questions only require you to tick the appropriate boxes. Opportunities are, however, provided for respondents to add any comments they consider necessary at the end of each of the main Sections of the questionnaire. Some of the questions asked are very similar to those used in surveys conducted in support of several recent studies (1) which were looking at all aspects of the training of British managers. This will enable the findings of this survey to be correlated with those of the more extensive studies.

Because of the nature of this survey it has not been possible to make it anonymous. You may, however, rest assured that all replies will be treated in the strictest confidence; so please be as frank as possible in your answers. Your personal experiences and opinions will undoubtedly be extremely important in helping to determine the directions which management education and training in RAOC will take in the future.

As the sample size of this survey is quite small you are asked to make a special effort to complete the questionnaire and return it by the required date. Thank you for your cooperation.

(1) See, for example, J Constable & R McCormick, 'The Making of British Managers', BIM/CBI (1987).

SECTION 1 BIOGRAPHICAL DETAILS

This Section asks you to give details of your previous educational and military qualifications prior to completing your postgraduate management course.

1. Name Initials

2. Date of Birth

3. If you are still serving in RAOC please indicate:

a. Your current rank

b. Your current appointment

c. Your unit

4. Previous education (tick the appropriate boxes)

First degree ☐

Member of Professional Institution ☐

HNC/HND ☐

Teaching qualification ☐

ONC/OND ☐

GCE 'A' levels ☐

GCE 'O' levels ☐

5. Do you have any of the following military qualifications? (tick the appropriate boxes).

psc ☐

sq ☐

ato ☐

pi ☐

fs ☐

tt/aic ☐

SECTION 2 YOUR POSTGRADUATE MANAGEMENT COURSE

This Section concentrates on your personal experience of management education and training. It looks at the postgraduate course which you attended, the research study which you undertook and your opinion of the training you received.

6. Where did you undertake your postgraduate management course?
(Tick the appropriate box)

- a. UMIST ☐
- b. CRANFIELD ☐
- c. RMCS ☐
- d. Other ☐ please specify

7. In which academic year did you attend the course?

19 /

8. Did you complete a GMAT test before entry?

Yes ☐ No ☐

9. What qualification did you obtain on completion of the course?

- a. Diploma ☐
- b. MSc ☐
- c. MDA ☐
- d. Other ☐ Please specify

10. Did you change your original course of study at any stage ie from Diploma to Masters student?

Yes ☐ No ☐

11. How was your course structured? (tick one only)

- a. A number of core subjects with specialist options. ☐
- b. Limited range of options from outset ☐
- c. Other ☐ please specify

12. What was the main subject area of your course?

.....

13. List the subsidiary subjects which you studied.

a.

b.

c.

d.

e.

f.

14. What was the title of your research thesis or dissertation?

.....

15. Describe briefly the topic which you researched.

.....

.....

.....

16. Did you undertake a joint research project?

Yes ☐

No ☐

17. Was the study set in a military context?

Yes ☐

No ☐

18. Was the subject matter of direct or indirect relevance to the Army in general or RAOC in particular? (Tick the appropriate boxes).

Direct Relevance

Indirect Relevance

Army ☐

☐

RAOC ☐

☐

19. Why did you select the topic for your research?

(tick one only)

a. Personal interest ☐

b. Suggested by RAOC ☐

c. University DS guidance ☐

d. Other ☐ please specify

20. Did you seek military clearance before undertaking your research?

Yes ☐ No ☐

21. Did your thesis/dissertation make recommendations for change in the Army or RAOC?

Yes ☐ No ☐

22. If you answered YES in question 21, have any of these recommendations been implemented?

Yes ☐ No ☐

23. Had you known which appointment you were to assume after completing your postgraduate course, would this have affected your choice of research topic?

Yes ☐ No ☐

24. Listed below are some of the topics which you may have studied as either main or subsidiary subjects. Referring only to those subjects which you actually studied, use the scale provided to indicate the extent to which they have subsequently been of value to you in the appointments you have held since completing the course. Note the '1' indicates that the training in that subject has been essential and that '5' indicates that the training has been of no value. Also indicate, by ticking the appropriate box, whether, in your opinion, too little or too much time was devoted to these subjects as a proportion of the course.

<u>Subject</u>	<u>Use</u>					<u>Time Proportion on Course</u>	
	Essential				None	Too Little	Too Much
a. Business Environment	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
b. Business Policy	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
c. Corporate & Strategic Planning	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
d. Financial Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
e. Management Accounting	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
f. Management Economics	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
g. Public Sector Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
h. Project Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
i. Technological Innovation	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
j. Management of Change	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
k. Behavioural Science	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>

<u>Subject</u>	<u>Use</u>					<u>Time Proportion on Course</u>	
	Essential				None	Too Little	Too Much
l. Organisation Structures	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
m. Organisational Sociology	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
n. Organisational Psychology	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
o. Information Technology	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
p. Quantitative Methods	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
q. Research Methodology	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
r. Human Resource & Personnel Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
s. Industrial Relations	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
t. Leadership & Interpersonal Skills	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
u. Distribution Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
v. Production Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
w. Operations & Logistics Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
x. Marketing Management	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>

25. The list is not exhaustive. Add any additional subjects which you may have studied and indicate their subsequent value to you.

<u>Subject</u>	<u>Use</u>					<u>Time Proportion on Course</u>	
	Essential				None	Too Little	Too Much
a.	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
b.	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
c.	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
d.	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
e.	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>
f.	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>

26. Any management training course is likely to confer both organisational and individual benefits and these benefits may be tangible or intangible. Some of the most commonly cited benefits are listed below. Rank up to 5 of these benefits in order of importance as they relate to the course which you attended. (Use '1' to indicate the most important and '5' the least important of your selections).

- a. Helping you to do your present job better. ☐
- b. Making you better able to get your ideas across to people. ☐
- c. Acquiring skills which you particularly needed at the time. ☐
- d. Helping you to get up-to-date with modern management. ☐
- e. Helping you to get the best out of other people. ☐
- f. Helping you to see your job and organisation in a wider context. ☐
- g. As planned preparation for a more senior position in the organisation. ☐
- h. Improving your prospects of promotion. ☐
- i. Providing a basis for further career development. ☐
- j. Providing you with a formal qualification which would increase your employability. ☐

27. List any other benefits of the course which you attended which you consider are important but which are not mentioned in the previous question.

.....

.....

.....

.....

28. List any negative factors or shortcomings in the course which you consider should be highlighted in this context.

.....

.....

.....

29. Had you known which appointment you were to assume after completing your postgraduate course, would this have affected your choice of the main and subsidiary subjects which you studied?

- a. Main subject: Yes ☐ No ☐
- b. Subsidiary subjects: Yes ☐ No ☐

30. Using the scale provided, indicate your personal experience of the aspects of the course listed below by circling the number which closely represents your view.

	<u>Good</u>			<u>Unsatisfactory</u>	
a. Standard of teaching	1	2	3	4	5
b. Relationship with lecturers	1	2	3	4	5
c. Library facilities	1	2	3	4	5
d. Computer facilities	1	2	3	4	5
e. University administration	1	2	3	4	5
f. Military administration	1	2	3	4	5

31. For what types of appointment do you think your higher management education makes you best equipped? List three types of appointments.

- a.
- b.
- c.

32. Did you receive any management training or education before your postgraduate course?

Yes ☐ No ☐

33. If you answered YES to question 32, please give the following details.

- a. What was the course called?
- b. Where was it held?
- c. How long was the course?
- d. Was it full time or part time? FT ☐ PT ☐
- e. Did the course lead to a qualification? Yes ☐ No ☐

34. Have you undertaken any management training or education since completing your postgraduate course?

Yes ☐ No ☐

35. If you answered YES to question 34, please give the following details:

- a. What was the course called?
- b. Where was it held?
- c. How long was the course?
- d. Was it full time or part time? FT ☐ PT ☐
- e. Did the course lead to a qualification? Yes ☐ No ☐

36. Are you a member of any of the following Professional Institutions?

- British Institute of Management (BIM) ☐
- British Computer Society (BCS) ☐
- Institute of Purchasing & Supply (IPS) ☐
- Institute of Management Services (IMS) ☐
- Institute of Training & Development (ITD) ☐
- Institute of Materials Management (IMM) ☐
- Institute of Logistics & Distribution Management (ILDM) ☐
- Others ☐ please specify

.....

37. Do you participate in any of the following activities of your Professional Institutions?

- Read professional journal ☐
- Attend branch meetings ☐
- Attend courses ☐
- Attend conferences ☐
- Contribute papers for publication ☐
- Hold committee or other offices ☐

38. Comments. If you have any additional comments on your personal experience of management education and training please write them in the space provided below.

SECTION 3 APPOINTMENTS HELD

This Section looks at how relevant your postgraduate management training has been in the appointments you have held since completing your course. The grid on the next page has been designed for this purpose. You are asked to list the appointments you have held and to describe briefly the main components of each post. This description should highlight the managerial content of the job (eg personnel responsibilities, financial/budgetary responsibilities and the like) and you should also give an indication of the % time spent on each function. On the right hand side of the proforma list those elements of your training which were of value in each appointment you have held. A separate column is also provided for you to list any features of the post for which management training would have been desirable but which was not covered by your own course. An example entry is included on the proforma.

Second Careers. To be completed by those officers who have retired from the British Army.

39. In which year did you retire?

40. What is your current employment?

41. Please give a brief description of your current appointment.

.....

.....

42. Please give an indication of the value of your salary package:

Up to £15,000 ☐ £15,000 to £25,000 ☐ £25,000 to £35,000 ☐

Over £35,000 ☐

43. How relevant was your postgraduate management training to securing your present employment?

Important ☐ Useful ☐ Not significant ☐

44. Was your postgraduate management qualification an important factor in your decision to leave the Army?

Yes ☐ No ☐

45. Comments. (All respondents) If you have any additional comments on the relationship between your training and the appointments which you have held, or are currently holding, which have been addressed in this Section of the questionnaire please write them in the space provided below.

CAREER HISTORY SINCE COMPLETING POSTGRADUATE COURSE

Ser	Dates		Appointment	Rank	Brief Job Description (f)	% Time (g)	Training Utilised (h)	Training Deficiencies (if any) (i)
	From	To						
a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	example only Sep 81	Oct 83	Planning Officer COD —	MAJ	Responsible to CPO for: Mobilisation planning Storage planning Work Study LTER input Incentive scheme Estb & mpr planning Input to ERB/SRB	20 25 15 10 5 10 15	Human Resource Management & Industrial Relations Organisational Psychology Quantitative Methods Project planning Information Technology	Operational & Logistics Mgt (esp Warehouse methods and inventory control techniques) Financial Management
2								

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
3								
4								
5								

SECTION 4 FUTURE TRAINING

This Section is designed to ascertain your views on a number of management training issues which are currently being examined by the Corps or which may need to be addressed in the future.

46. Do you personally have any definite plans to undertake any further management training during the next two years?

Yes ☐ No ☐

47. If YES, is this:

- a. A course leading to a qualification ☐
- b. An Army course ☐
- c. Other ☐ please specify

48. Do you see this primarily as: (tick one only)

- a. An individual decision ☐
- b. At the initiative of the Army ☐
- c. A joint decision ☐

49. Do you see this course primarily as:

- a. Helping you to improve your performance in your present job ☐
- b. Enhancing your future prospects ☐
- c. Some other purpose ☐ please specify

50. A distinction can be made between management education and management training. The former is usually undertaken externally, is of longer duration and normally involves the award of a qualification. Management training, on the other hand, normally refers to shorter, in-house courses which do not lead to a qualification. In your opinion does RAOC give its officers sufficient opportunities for:

- a. Management education Yes ☐ No ☐
- b. Management training Yes ☐ No ☐

51. In the development of a good manager how important do you consider the contribution of the following aspects? Please give each aspect a score out of 5, with 5 indicating very important and 1 indicating not at all important.

Score out of 5

- a. Inherent ability/personality ☐
- b. Initial vocational education (ie direct contribution to future job eg accountancy, management etc) ☐
- c. Initial non-vocational education ☐
- d. In-Service training ☐
- e. Job experience ☐
- f. External management education (eg postgraduate course) ☐

52. To what extent should any programme of management education be:

Express your answer
in Terms of a Percentage
for each effect

- a. An immediate contribution to job performance. %
- b. An investment for the future by giving a broadly based perspective. %

53. At what stage in an officer's career do you consider he should attend an external management education programme? (Tick one only)

- Senior Captain ☐ Junior Major ☐ Middle/Senior Major ☐
- Lieutenant Colonel ☐ Other ☐ please specify

54. Do you consider it desirable and feasible to combine some elements of in-Service training and external courses as modules contributing to a formal programme of management education leading to a qualification, subject to suitable quality standards?

(tick one only)

- a. Generally desirable and feasible ☐
- b. Desirable but not feasible given the gap between external and internal forms of development ☐
- c. Not desirable. Internal management training and external management education should be kept separate ☐

55. This question focuses on aspects of external management education and its relationship to internal forms of management training. Shown below is a range of aspects of management education and training.

In column 1, please indicate your agreement or otherwise that external management education does carry out each of these aspects. Using a scale of 1 to 5, score 5 if you agree strongly and 1 if you disagree strongly.

In column 2, please indicate, in the same way, your agreement or otherwise that internal management training does carry out each of the aspects listed.

In column 3, please rank the 5 most important factors shown, with 1 as the most important, 2 as the second most important and so on.

	<u>Column 1</u> External mgt education does	<u>Column 2</u> Internal mgt trg does	<u>Column 3</u>
a. Instill the conceptual dimensions of management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Provide access to a range of ways of doing things rather than the specific way of any organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Provide access to a peer group of managers in other contexts and organisations and thus provide learning through mutual interaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Bring together in an integrated way the various dimensions of management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Introduce new ideas in management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Teach immediately practical skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Link development more closely to the various dimensions of the organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Link development more closely to immediate experiential needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Provide a cohesive esprit de corps amongst managers within the organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Help provide a network of contacts relating to organisational activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Better instill skills specific to the organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Give an intellectual depth to the understanding of management issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Teach behavioural and organisational skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Provide a substantial breadth of experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

56. Whilst accepting that the content of a management education programme would depend in part on the stage of an officer's career at which it is taken, what proportion of such a programme should be devoted to each of the aspects shown? Please write in the percentage.

- a. Knowledge of management theories eg economic, financial, behavioural, numerical theories. _____ %
- b. Knowledge of the management environment eg economic, industrial, technical structures and policies. _____ %
- c. Specific management skills eg ability to handle computers, production techniques, personnel procedures and the like. _____ %
- d. General management skills, especially of a strategic nature. _____ %

57. Given current financial and manpower constraints, how do you think the external element of a management education programme should be carried out?
(tick one only)

- a. In an institution of higher education on a full time basis for say, one year. ☐
- b. An equivalent commitment in an institution of higher education on a part time basis over, say, a three year period. ☐
- c. An equivalent commitment on a modular basis with some full time attendance for limited periods of, say, 3 to 6 weeks. ☐
- d. An equivalent commitment by a distance learning programme. ☐

58. How important do you think it is for this programme of management education to lead to a formal management qualification? Please score 5 for very important and 1 for unimportant.

Score

59. Comments. If you have any additional comments on the future of management education and training in the Corps please write them in the space provided below.

RESEARCH TOPICSA - UMIST

<u>Title</u>	<u>Qualifi- cation</u>	<u>Mode</u>
<u>1974/75</u>		
Inventory Stock Levels for Greater Manchester Bus Company kiosks	Diploma	Joint
The Need for Computer Education for Management	Diploma	Individual
Personal and Attitudinal Profile of a Scout Leader	Diploma	Joint
Psychological Success Criteria in EOD	Diploma	Joint
International Business Expansion	Diploma	Individual
<u>1975/76</u>		
Perceptions of Authority	Diploma	Joint
Establishment of Centralised Production Plant for Manufacture of Sterile Fluids.	Diploma	Joint
Worker Participation	Diploma	Individual
The Marketing of Textured Soya Protein	Diploma	Joint
RAOC Management Courses	Diploma	Joint
The Employment of Women as Firefighters	Diploma	Individual
<u>1976/77</u>		
Inventory Control: A survey of 25 Companies in the Greater Manchester Area	Diploma	Joint
Buying Habits in the Printing Industry	Diploma	Individual
The Privacy and Security of Personal Information	Diploma	Individual
Naive Portfolio Diversification	Diploma	Individual
Banking and the Serviceman	Diploma	Individual
Patterns of Military Socialisation	Diploma	Individual
<u>1977/78</u>		
Collaboration in the Defence Industry	Diploma	Individual
Buyer Behaviour in Selected UK Process Industries	Diploma	Joint
A suitable Case for Treatment (Personnel Management Theme)	Diploma	Individual
The Marketing of Real Ale in the Manchester Area	Diploma	Individual

<u>Title</u>	<u>Qualifi- cation</u>	<u>Mode</u>
Productivity in a Single Company Scheme	Diploma	Individual
The Documentation System at Vitan Wolf Ltd	Diploma	Joint
Maintenance Stores Management in a Chemical Process Company	Diploma	Joint
<u>1978/79</u>		
Health Visitor Recruiting in the Manchester Area Health Authority	Diploma	Joint
On-Line Stock Receipt System for Ingersoll Rand	Diploma	Individual
Effects of Behavioural Science Jargon in the National Health Service	Diploma	Joint
Demographic Survey of Students in UOTCs	Diploma	Individual
<u>1979/80</u>		
The Materials Handling Selection Difficulties of a Small Company	Diploma	Individual
The Requirement for a Computerised Drug Control System in a Hospital Pharmacy Environment	MSc	Individual
Accommodation Patterns in Hospitals	Diploma	Individual
Inventory Management at UMIST	MSc	Individual
Economies of Scale in the Brewing Industry	MSc	Individual
A Warehouse Capacity Study	MSc	Individual
<u>1980/81</u>		
Microelectronics in the UK	Diploma	Individual
Construction and Validation of a Practical Test	MSc	Individual
Management in the Nationalised Industries	MSc	Individual
Consumer Satisfaction in Leisure Industries	Diploma	Individual
Attitudes of Staff and Patients at a Special Hospital	MSc	Individual
The Politics of the Social Contract and its Demise	Diploma	Individual
<u>1981/82</u>		
Unemployment, Psychological Well-Being and Other Salient Issues	MSc	Individual
Leadership and Management	Diploma	Individual
Firearms Control in Great Britain	Diploma	Individual

<u>Title</u>	<u>Qualifi- cation</u>	<u>Mode</u>
Simulation of an Automated Non-Ferrous Foundry as an Aid to Management	MSc	Individual
Load Planning Operation for the NW Region of a Large Multi-National Company.	MSc	Individual
An Analysis of the RAOC Officers Petroleum Course.	Diploma	Individual
<u>1982/83</u>		
Stress and Cardiovascular Disease	MSc	Individual
Industrial Discipline and Legislation: An Examination of Management Practice	MSc	Individual
An Overall Examination of the Main Performance Indicators During 30 years of the National Health Service	MSc	Individual
Performance Appraisal and Training in Manufacturing Industry	Diploma	Individual
The Effects of the Introduction of New Technology into the UK Office Sector	MSc	Individual
The Feasibility of Introducing a Cashless Pay System into Cordon - Bleu Frozen Foods Centres Ltd	Diploma	Individual
<u>1983/84</u>		
Assessment Centres: Their Use in Industry in Great Britain	MSc	Individual
A Consideration of Employee Participation in Ferranti plc	Diploma	Individual
Quality Circles: An Examination - Pass or Fail?	MSc	Individual
The Impact of Concessions and Design Modifications on Quality Costs	MSc	Individual
A Study to Establish the Possibility of Using Psychometric Tests as an Indication of a Police Officers Suitability to Carry Fire Arms	MSc	Individual
<u>1984/85</u>		
A study of the Use of Management Information Reports in the RAOC	Diploma	Individual
A Review of Officer Recruitment and Selection in the British Army	Diploma	Individual
A Validity Study of the Army's Selection Centre Test Battery	Diploma	Individual

<u>Title</u>	<u>Qualifi- cation</u>	<u>Mode</u>
<u>1985/86</u>		
Premature Voluntary Release in the Army	MSc	Individual
A Case Study of Management Structures within RAOC Depots	MSc	Individual
Factors Affecting the design of Assessment Centres in Industry	MSc	Individual
<u>1986/87</u>		
Manpower Wastage in the Army	MSc	Individual
The Characteristics of Managers in a Specific Organisation	MSc	Individual
Consideration of Job Satisfaction as an Element of User Involvement in MIS Design	MSc	Individual
Quality Assurance Systems in Suppliers to the Nuclear Industry	MSc	Individual
<u>B - CRANFIELD INSTITUTE OF TECHNOLOGY</u>		
<u>1983/84</u>		
Complex Inventory Simulation	MSc	Individual
An Examination of the Requirements of the Supply System for Aircraft Spares	MSc	Individual
<u>1984/85</u>		
The Design of a Bulk Pallet Storage Area and Complementary Forward Stock Replenishment System for a Mail Order Warehouse	MSc	Individual
Review of a Product Return System for EMI	MSc	Individual
<u>1985/86</u>		
An Investigation of Advanced Trucking Systems for Nationwide Parcel Distribution	MSc	Individual
A Review of Hazardous Item Storage and Distribution Within the RAOC	MSc	Individual
<u>1986/87</u>		
An Examination into Aspects of Logistic Support in an Energy Industry	MSc	Individual

ABBREVIATIONS

ADP	Automated Data Processing
AMA	American Management Association
AMBA	Association of Masters of Business Administration
AMED	Association for Management Education and Development
AOS	Army Ordnance Services
ASC	Army Staff Course
BAOR	British Army of the Rhine
BIM	British Institute of Management
CATS	Credit Accumulation and Transfer Scheme
CBL	Computer Based Learning
CCPMO	Consultative Council of Professional Management Organisations
CIT	Cranfield Institute of Technology
CMED	Council for Management Education and Development
CNAA	Council for National Academic Awards
CUMS	Council of University Management Schools
DBA	Diploma in Business Administration
DGOS	Director General of Ordnance Services
DMS	Diploma in Management Studies
DSM(A)	Directorate of Supply Management (Army)
FMIS	Financial Management Information System
GMAT	Graduate Management Admission Test
IMCB	International Management Centre, Buckingham
IPS	Institute of Purchasing and Supply
IT	Information Technology
JCSC	Junior Command and Staff Course
JOTES	Junior Officers Training and Education Scheme
JSDC	Joint Service Defence College
MBA	Master of Business Administration
MDA	Master of Defence Administration
MMD	Middle Management Development
MPT	Manpower Planning Target
NCVQ	National Council for Vocational Qualifications
NEDO	National Economic Development Office
OO	Ordnance Officer
PCFC	Polytechnic and College Funding Council
POL	Petroleum, Oil and Lubricants
QMG	Quartermaster General
RAEC	Royal Army Education Corps
RAOC	Royal Army Ordnance Corps

RCDS	Royal College of Defence Studies
RCT	Royal Corps of Transport
REME	Royal Electrical and Mechanical Engineers
RMAS	Royal Military Academy, Sandhurst
RMCS	Royal Military College of Science
ROCS	Review of the Officer Career Structure
ROTE	Review of Officer Training and Education
SMDP	Senior Management Development Programme
SOLC	Senior Officers Logistic Course
TEC	Training and Employment Council
TMP	Top Management Programme
UFC	University Funding Council
UMIST	University of Manchester Institute of Science and Technology
YO	Young Officer

BIBLIOGRAPHY

AIREY F and GOODMAN M N, "A Survey of Distance Education in Industry Training", Harbridge House, 1986.

ANDERSON G, "Developing a Distance Learning Route to the MBA: The Strathclyde Experience", Business Education, Vol 8 No 2, 1987.

ASCHER K, "Masters of Business. The MBA and British Industry", Harbridge House Europe, Sep 1984.

ASCHER K, "Management Training in Large UK Business Organisations - A Survey", Harbridge House, 1983.

BARHAM K, FRASER J and HEATH L, "Management for the Future", FME/Ashridge Management College, Mar 1988.

BECK J and COX C (Ed), "Advances in Management Education", Wiley, 1980.

BECK M, "Positioning Managers for the Future - The Role of the Government", Industrial and Commercial Training, Vol 19 No 6, Nov/Dec 1987.

BENJAMIN P, "Europe Discovers the Golden Passport", Business, Feb 1987.

BIRCHALL D W, "Distance Learning in Management Education: A Case Example", Journal of European Industrial Training, Vol 10 No 6, 1986.

BOYATZIS R E, "The Competent Manager", Wiley, 1982.

BURGOYNE J, "Competency Approaches to Management Development", Paper given at AMED Conference, Ashridge, Jan 1989.

CAIE B, "Learning in Style - Reflections on an Action Learning MBA Programme", Journal of Management Development, Vol 6 No 2, 1987.

CAMP R R, BLANCHARD P N and HUSZCZO G E, "Toward a More Organizationally Effective Training Strategy and Practice", Prentice-Hall, 1986.

COMMITTEE ON HIGHER EDUCATION (Chairman: Lord Robbins), Higher Education Report, Comd 2154, HMSO, 1963.

CONSTABLE J and McCORMICK R, "The Making of British Managers", BIM/CBI, 1987.

COOPER C L (Ed), "Developing Managers for the 1980s", MacMillan Press, 1981.

COOPERS and LYBRAND ASSOCIATES, "A Challenge to Complacency", NEDO/MSO, Nov 1985.

COSTER P R, "Training for Senior Management Study", Cabinet Office (Management and Personnel Office), 1984.

COSTER P R, "The Civil Service Senior Management Development Programme", MEAD, Vol 18 Part 3, Autumn 1987.

- CUNNINGHAM I, "Developing Chief Executives", Ashridge Management College, Nov 1986.
- DELOITTE, HASKINS and SELLS, Report of a Study into a Charter for Managers, Sep 1988.
- EASTERBY-SMITH M, "Evaluation of Management, Training and Development", Gower, 1986.
- ECONOMIST PUBLICATIONS, "MBA: The Best Business Tool?", Economist Publications, Special Report No 1154, Nov 1988.
- EILON S, "Aspects of Management", Pergamon Press, 1979.
- EVARTS H F, "The Competency Programme of the American Management Association", Industrial and Commercial Training, Vol 19 No 1, Jan/Feb 1987.
- FORRESTER P, "A Study of the Practical Use of the MBA", BIM, 1984.
- FORRESTER P, "The British MBA", Cranfield Press, 1986.
- FRANKS, Lord, "British Business Schools", BIM, 1963.
- GARRATT R, "The Learning Organisation", Fontana, 1987.
- GRAY C and PIKE R H, "Part-time MBA Programmes", in AMBAs "Guide to Business Schools", Pitman, 1988.
- GRIFFITHS B and MURRAY H, "Whose Business? A Radical Proposal to Privatisise British Business Schools", Hobart Paper No 102, IEA, Jun 1985.
- HAMBLIN A C, "Evaluation and Control of Training", 1974.
- HANDY C, "The Making of Managers", MSC/NEDC/BIM, Apr 1987.
- HANDY C, "Understanding Organisations", Penguin, 1981.
- HANDY C, GORDON C, GOW I and RANDLESON C, "Making Managers", Pitman, 1988.
- HAWRYLYSHYN B, "Management Education - A Conceptual Framework" in "Management Development and Training Handbook" (Ed), McGraw-Hill, 1983.
- HOGARTH R M, "Evaluating Management Education", Wiley, 1979.
- HUSSEY D E, "Management Training and Corporate Strategy", Pergamon Press, 1988.
- JAMES B, "The Role of the MBA in the UK", Industrial and Commercial Training, Vol 19 No 5, Sep/Oct 1987.
- JONES J E and WOODCOCK M, "Manual of Management Development", Gower, 1985.
- KATZ R L, "Skills of an Effective Administrator", Harvard Business Review, Sep/Oct 1974.
- KEPNER C H and TREGOE B B, "The New Rational Manager", John Martin Publishing Ltd, 1981.

- KOLB D A, "Experiential Learning", Prentice-Hall, 1984.
- KOTTER J P, "The General Manager", Free Press, 1982.
- LEGGATT T W, "The Training of British Managers", The Institute of Manpower Studies, HMSO, 1972.
- LIFE E A, "Training for Management, a Historical View", in Rapaport R N, "Mid-Career Development", Tavistock Publications, 1974.
- MANASIAN D, "Degrees of Confusion", International Management, Jun 1988.
- MANGHAM I L and SILVER M S, "Management Training: Context and Practice", University of Bath, Jun 1986.
- MANT A, "The Experienced Manager: A Major Resource", BIM, 1969.
- MARGERISON C J, "Managing Career Choices" in "Handbook of Management Development" (Ed), Gower, 1986.
- MINTZBERG H, "The Nature of Managerial Work", Prentice-Hall, 1980.
- MUMFORD A (Ed), "Handbook of Management Development", Gower, 1986.
- MUMFORD A, ROBINSON G and STRADLING D, "Developing Directors", MSC, Jan 1987.
- MURRAY H, "Management Education and the MBA - It's Time for a Rethink", Paper presented at CRAC Conference, Cambridge University, Sep 1986.
- McGREGOR D, "The Human Side of Enterprise", McGraw-Hill, 1960.
- O'LEARY J, "Improving by Degrees", Times Higher Educational Supplement, 17 Jun 1988.
- ODIORNE G S, "The Executive MBA: A New Way to Develop Talent", Personnel, Nov 1985.
- PALIWODA S J and HARRISON A C (Ed), AMBAs "Guide to Business Schools", Pitman, 1988.
- PEEL M, "Management Development and Training", BIM, 1984.
- PEPPERCORN G and SKOULDING G, "Profile of British Industry: The Manager's View", Ashridge/BIM/Cranfield, Dec 1987.
- PETERS J, "The 'New MBA' - What it Means for Managers", Business Education, Vol 9 No 1, 1988.
- PHILLIPS-MADSON L J and SLOAN P R, "Managerial Development in the US: A Survey of the Executive MBA", Journal of General Management, Vol 13 No 3, Spring 1988.
- POWERS E A, "Enhancing Managerial Competence: The American Management Association Competency Programme", The Journal of Management Development, Vol 6 No 4, 1987.
- RADERECHT P, BASSET and JAMES A, "Postgraduate Business Schools", Association of Graduate Careers Advisory Services, Oct 1987.

REVANS R W, "Action Learning", Blond, 1980.

STEWART R, "Managers and their Jobs", MacMillan, 1967.

STEWART R, "Contrasts in Management", McGraw-Hill, 1976.

SURTEES G, "The Making of Defence Managers", Civilian Management (Training) MOD, Apr 1988.

TAYLOR B and LIPPITT G (Ed), "Management Development and Training Handbook", McGraw-Hill, 1983.

WHITLEY R, THOMAS A and MARCEAU J, "Masters of Business? Business Schools and Business Graduates in Britain and France", Tavistock Publications, 1981.

WILLS G, "Creating Wealth Through Management Development", MCB University Press, 1988.

